The Lettsomian Lectures
ON
THE OBJECTS AND LIMITS OF OPERATIONS FOR CANCER.

Delivered before the Medical Society of London

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LECTURE I.[1]

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MR. PRESIDENT AND GENTLEMEN,—In the first place allow me to thank you for the high honour you have done me in selecting me as your Lettsomian lecturer on this occasion. While your selection has done me great honour and given me much pleasure it has also caused me great anxiety, more especially in the choice of a subject which would be of sufficient interest to the Fellows of this society. For it seems to me that the great value of lectures of this kind is that they afford an opportunity not so much of presenting original work as of reviewing the present standpoint of medical science in some particular department, of criticising the advances that have been made, of seeing what of these advances are good and what are of doubtful value, and thus of furnishing a basis for further work. One of the departments in which there has been much activity of late years is in the treatment of cancerous diseases. The last few years have seen marked alterations in the older methods of operating in these cases, and also the introduction of operations in regions and of an extent formerly not thought of. Opinions differ very much at the present time as to the utility of many of these surgical procedures, and it is a matter of much interest and importance to consider the results which have been obtained and to come to some definite conclusions as to their value. And it is with a view of trying to estimate the value of the work done in this department that I have decided to discuss in these lectures the objects which we should aim at, and the limits to which we may go, in operating for cancerous diseases.

By cancer I mean the carcinomata the essential feature of which is continuous and excessive growth of epithelium. Once this growth has commenced nothing that we know of has any power to stop it. It invades the surrounding tissues, it spreads along the lymphatic vessels or is carried by these vessels to the nearest lymphatic glands, it passes from one lymphatic gland, or one chain of lymphatic glands, to another till it ultimately reaches the main lymphatic trunks, through which it enters the blood stream and is deposited in distant organs and parts of the body. Deposited in these organs it again grows, and the same cycle of events follows, or would follow were it not that the patient soon succumbs from general poisoning as the result of absorption of materials elaborated at the seat of the disease, from interference with the vital functions owing to the presence of the growth in important organs, from repeated hæmorrhages due to erosion of bloodvessels, and so on. Once this overgrowth of epithelium has begun, it goes on inexorably, unless we can arrest it, to the one fatal end. A question of great importance for our subject is that of the local or constitutional origin of cancer, and I may say at once that so far as I am concerned cancer is essentially a local disease. Formerly cancer was very generally regarded as a constitutional affection and therefore cure by operation alone was looked on as hopeless, and medicaments of all kinds were poured into the patients so as to expel the black bile or whatever else was supposed to be the cause of the disease. Operation was looked upon simply as a means of prolonging life for a short time, of relieving the patient's mental anxiety, and of getting rid of certain local troubles, and not as a means of permanently freeing the patient from the disease. Indeed, the chief reasons formerly adduced in support of the constitutional origin were the rapid recurrence of the disease after operation and the increased rapidity of growth of these recurrences, and this was supposed to be due to the increased activity of the constitutional condition as a result of the local disturbance. Of late, however, more especially since the microscope has revealed the character of the disease, the view of the local origin of cancer has been gaining ground, and surgeons for the most part now undertake these operations in the hope of curing the patient and not merely of temporarily prolonging life. Recurrence in deeper tissues is no evidence in favour of the constitutional theory, for as epithelium only grows from epithelium, the fresh growth of a mass of epithelial cells in muscles, glands, connective tissues, &c., after an operation, could not imply that we have to do with a constitutional disease which has broken out again, but simply that all the epithelial invasion was not removed in the first instance. The fact that there are now many cases on record where patients have remained for a long time well after operation is also evidence in favour of the local origin of cancer. I shall presently refer to some statistics on this point, but I may here mention two remarkable examples showing the local nature of recurrences. The most striking of these is a case recorded by Gross of spindle-celled sarcoma of the breast (and the argument is the same here as for carcinoma) where, after twenty-two operations performed during the course of four years, and the removal of almost all the pectoral and intercostal muscles, the patient remained well and had no trace of recurrence nearly eleven years later, the only conclusion here being that at all previous operations portions of disease had been left behind, but that at length all had been rooted out. The other is a case narrated by Oldekop, where a cancer of the breast was removed in 1852 with recurrence a few months later. Three years afterwards the other breast was removed for cancer, and this was followed by rapid recurrence a month later and a fresh operation. The patient was well twenty-three years subsequently, having had no further trouble.

Is cancer curable? Theoretically, being a local disease and spreading in the way we have described, it should be quite curable in cases where it is possible to remove all the off-shoots from the primary nodule, and clinical evidence bears out this view. We know that if any visible portion of disease is left behind recurrence takes place almost at once, and even when the disease left is invisible recurrence takes place in the majority of cases within a year. The cases which recur later are quite few in number, and after three years the chances of recurrence are so slight that most surgeons assume, following Volkmann, that a patient who shows no disease for three years after an operation may be looked on as cured, and they ascribe disease appearing locally at a later period to a fresh development and not to a residue of the old trouble. Cases, however, are sometimes met with in which late recurrence takes place in parts, such as in glands, where the cells must have remained dormant from the time of the previous operation. Not very long ago I assisted Sir Joseph Lister in operating on a case in which the breast had been removed for cancer about fifteen years previously. At that time a few very small, hard glands were felt in the axilla, but were not touched. They remained *in statu quo* till a short time before the second operation, when they began to enlarge, and were accordingly taken away. On examination they proved to be carcinomatous glands. While writing this paper I have seen a case in which the breast and axillary glands were removed nearly four years ago and in which a small recurrence in the axilla has just been noticed, and Case 12, Table I., is apparently a similar example. In the list of tongue cases, to be dealt with in the following lectures, two will be found of Kocher's where disease reappeared locally ten and twelve years after the operation, but in these the question of a fresh development arises. Gross has gone very fully into this matter, and states that of all the recurrences after breast operations at most 2·3 per cent. take place after three years. On the other hand, König gives a much larger proportion of late recurrences, placing it at 15 per cent. in patients alive and well after three years. The facts, however, vary very much with the situation and kind of disease; in the case of intestinal cancer late recurrences are by no means rare. Nevertheless, for all practical purposes we may adopt the three-year limit and may feel sure that when a patient, especially with breast or throat cancer, has passed that limit safely the great probability is that he will have no further trouble.

If we take the cases of disease in parts where it is in the first instance superficial, and where there is plenty of room for cutting wide of it, we find a large number which remain free from recurrence for many years. I may instance especially epithelioma affecting the extremities. There the

[1] Lectures II. and III. will be delivered on Feb. 17th and March 2nd respectively.

disease is superficial in the first instance, the epithelial cells are apparently not so readily, or at any rate not so early, carried along the lymphatic vessels as in cases where muscles are affected or where the cancer cells are smaller, as in the breast. The glands are readily accessible and one can get well beyond the disease by amputation, and in amputating well above the part the local disease is thoroughly and widely removed. Statistics of the results of cancer of the extremities are given by various authors and are very favourable. Thus, to mention only one, R. Volkmann in his papers on this subject in Volkmann's *Klinische Vorträge* gives the cures as 51 per cent. and the recurrences as 35 per cent.

Another very favourite seat of cancer is in the face, and there also we have probably all had cases where free removal of the disease has apparently cured the patient. The least favourable of the face cancers is that of the lip, no doubt because the muscle is soon attacked, but even here the results strongly support the view of the curability of the disease. Thus Worner brings forward a large number of cases—277 operations—which had occurred in Von Bruns's clinique during a period of forty-one years. Of these, 106, or 38·2 per cent., remained well for more than three years, and in 54, which also remained well, the three-year limit had not yet been reached. The recurrences were 36 per cent. Twenty-one of the patients had remained well for periods varying from ten to forty years. Maiweg gives the results at Bonn of 182 patients, and of these 81 had remained free from recurrence for from three to eighteen years, giving the percentage of cures at about 44 per cent.; in 49 of these cases more than six years had elapsed, and in addition to this number there were also 44 who were free from recurrence but who had not yet reached the three-year limit. It is also an encouraging point with regard to these cases that in several of those ultimately cured one or more operations for recurrence have been carried out soon after the first operation. Thus, in the 81 cured cases in Maiweg's list 9 had had recurrences, 1 of them thrice, 1 twice, and the rest once. Taking the results of a large number of surgeons together—namely, Thiersch, Billroth, Von Bergmann, Von Winiwarter, Fischer, Koch. Partsch, and Bruns—the proportion of cases of cancer of the lip well three years after operation is 28·1 per cent.

Take, again, uterine cancer. Hoffmeier gives the cases of cancer of the portio vaginalis and cervix uteri operated on in Schröder's clinique, and of these 42 per cent. remained well after three years and 41·3 per cent. after four years, the operation being in most of them high amputation of the cervix. In Martin's statistics of total extirpation of the uterus for all forms of cancer 45·7 per cent. remained well after three years. Of these, 10 were cases of cancer of the body of the uterus, and recurrence only took place in one. In both of these reports, however, we probably have to do with carefully selected cases and do not thus get a true view of the probability of cure.

Let us pass on now to the subject proper of these lectures—namely, the *objects and limits of operation* in cases of this disease. The primary object of operation in cancer is, of course, the prolongation of the patient's life and the alleviation of his local trouble, and what I propose to assert in these lectures is that these results are in most cases best attained by aiming, where possible, at the cure of the disease. Up till quite recently, and even now, many surgeons approach operation in these cases impressed with the view that real cure is practically hopeless, and that, with a few rare exceptions, the most that can be expected is prolongation of life for a variable length of time. They therefore oppose elaborate and extensive operations which in themselves must involve considerable risk of life and are content with fairly free removal of noticeable disease; in some cases, indeed, they do not even go so far. For example, in cases of mammary cancer, even where some enlarged glands are to be felt in the axilla, they comfort themselves with the idea that the glands may only be enlarged from irritation and not from cancerous deposit, and therefore leave them alone until their true cancerous nature is only too evident. Of course, if operations are performed in this manner and with these views, it is no wonder that these surgeons are confirmed in their views and go on operating on cancer with the sole object of prolonging life for a comparatively short time. In discussing the curability of the disease I have already mentioned evidence as regards cancer of the extremities, lips, and uterus which shows that a real cure is obtainable in a very considerable proportion of cases, and in the following lectures I shall try to produce similar evidence as regards other parts. I therefore hold, and would strongly urge, the view that the first question to be kept before us in investigating a case of cancer is whether there is any possibility of curing the disease or not. Such a point of view makes a very great difference in the operation, for it is not then sufficient to remove only the noticeable disease, but it is necessary to take away as far as possible the parts in which disease may have become disseminated although still unrecognisable—in other words, possibly infected lymphatic areas. Thus, if the skin is affected a considerable portion around must be taken away, and this is the more necessary where the infection of the skin has come from beneath, as, for example, where cancers of the breast reach the surface, for the dissemination in the cutaneous lymphatic plexus is often under these circumstances very rapid and extensive, and this is probably due in part to the larger size of the deep cutaneous plexus, which will, in the latter case, be first involved. Again, where muscle is infected the cancer cells are very rapidly and early driven along the lymphatic vessels of the muscle, and even though there may only be one visible nodule in the muscle the whole or the greater part of it must be looked on as suspicious and must be removed if there is to be anything like certainty in attaining the object of the operation—namely, the patient's cure. Again, as regards the lymphatic glands, we know that from a very early period they become affected, and that, of course, without any visible enlargement in the first instance; and, in addition to this infection of the glands without enlargement, plugs of cancer cells very often stick in the lymphatic vessels on their way to the glands. Hence it is necessary in all cases where the disease has lasted any time or extended at all deeply not only to remove the primary mass freely but also to take away the whole lymphatic area up to, and including, the nearest lymphatic glands. Thus the operation performed with the object of curing the disease becomes a much more extensive one, and consequently much more serious, than that which simply aims at getting rid of the main trouble for a time and prolonging the patient's life.

The first question to be considered, then, with regard to a case of cancer is the anatomical one—namely, whether it is anatomically possible to remove all the local disease and the probably infected lymphatic area so thoroughly as to give a fair chance of non-recurrence. If this is anatomically possible the next questions are what are the chances of death as the result of the operation, and what will be the subsequent functional result? In considering these questions we must remember that we are dealing with an otherwise incurable disease, one which is comparatively rapidly fatal, and one which in certain regions—for example, the throat—is often the cause of very extreme suffering before death supervenes, and therefore, even although the risks are very great, unless the result of the operation is certainly fatal the question of operation ought to be presented to the patient if there is a reasonable chance of removing the disease. There is at the present time a tendency with some surgeons to careful selection of cancer cases for operation—that is to say, only to operate on quite simple cases This is not, I think, a proper point of view. No doubt it is the way to get good statistics; but what of the poor patients who are not operated on because the prospect of success is not good? I do not think that patients should be refused operation unless the disease cannot be removed, unless early recurrence is very highly probable, or unless operation means almost certain death or yields a hopeless functional result. Of course, if one has something better to substitute for the radical operation, such as colotomy in extensive rectal cancer, the matter is quite different, but where this is not the case the patient should be told all the circumstances and allowed to take his choice. The position which one ought to take up as adviser of the patient is, I admit, in some of these cases a very difficult one. The following are the lines which I myself go upon. If there is no especial danger in the operation, and the chances of cure are good, as in the case of an ordinary breast cancer, then I should urge the operation, and should not enter into any such details with regard to it or the disease as might frighten the patient. Where the operation is more severe and the probable result is not so good—as, for example, in a breast case with marked adhesion to the muscles—I do not urge the operation, but I tell the patient that I think it is still worth while taking the chance, and I also point out that there is likely to be a good deal of inconvenience after the operation in the way of interference with the movement of the arm; such a patient will usually decide to have the operation done. Where the immediate

danger of the operation is very great, as in the throat cases which I shall mention in the next lecture, but where it still seems anatomically possible to take away the whole disease, the decision must, I think, be left entirely to the patient. The dangers of the operation and the risks of recurrence must be fully pointed out, as well as the subsequent functional results, and the patient must be left to decide. The position which I have assumed in these cases is this, that after emphasising the dangers of the operation and laying the whole matter before the patient in its worst light I have said that if he wishes to avail himself of the chance I am willing to perform the operation. The majority of such patients, when they know the facts of the case, prefer to make the best they can of what period of life remains to them, while some on the other hand decide to have the operation performed, and a certain proportion of these, small, it is true, reap their reward in marked prolongation of life, or even in permanent freedom from the disease. The primary object of operation in these cases being, therefore, cure, the limits of the radical operation are where there is no reasonable prospect of removing the whole disease, or where, along with a very poor prospect of success, there is a very high mortality from the attempt. In such cases I do not think that operation should be mentioned at all, for even where the patient recovers from it and has presumably two or three months added to his life few would, I think, thank one for it, seeing that these two or three months have been spent in convalescing from a serious and, in the end, useless operation. But even in cases where hopes of cure or marked prolongation of life by a radical operation are out of the question operation may sometimes be advisable, with the object of removing symptoms which are immediately threatening to life, such operations, for example, as tracheotomy, colotomy, &c., or, in the second place, with the object of taking away the primary disease from a part, such as the mouth or throat, where its continued development means intense pain and trouble, and thus of substituting for these troubles an easier death from exhaustion. A *sine quâ non* of such operations must, however, be that they are reasonably free from immediate risk, and with regard to the second class that there is a prospect of attaining the object of the operation—namely, the entire removal of the disease from the part operated on. I do not think that a dangerous operation is allowable for simple relief of symptoms, however proper it may be if a cure may be hoped for. There are thus two different objects to be held in view, and two different questions as regards operation which we must bear in mind in treating a case of cancer—namely (1) can we reasonably hope for a cure? for if we can, a serious or dangerous operation is permissible; or (2) cure not being possible, can we decidedly ameliorate the patient's condition by operation, such operation, however, not involving any great risk to life?

It is, of course, impossible for me in the time at my disposal to discuss the objects and limits of operation for cancer in all parts of the body, and I have therefore selected three regions for examination—namely (1) the breast, (2) the throat, and (3) the intestinal tract, as these three regions illustrate very well all the points bearing on our subject.

1. CANCER OF THE BREAST.

The female breast is one of the most common seats of cancerous disease, and great attention has consequently been paid to cancer in this region, but it is only recently that any important advance has taken place. When I was attending classes on surgery, twenty-four years ago, the teaching which I received, except from Sir Joseph Lister, as regards the method of operation, was simply to remove the breast in these cases by an elliptical incision including the nipple. The pectoral fascia was not taken away; indeed, it was held that on no account must it be touched, because otherwise the suppuration which was apt to follow might be extremely dangerous; and, lastly, only rarely and with the greatest hesitation were one or two glands excised away from the axilla. As antiseptic surgery began to exercise its influence, and as it became evident that the extent of the operation did not increase the risk of septic disease, the tendency was towards more extensive operations, and in this, as in many other departments of surgery for which he gets no credit, Sir Joseph Lister took the lead and began to extend the area of operation, especially in the way of more extensive, and finally of more or less complete, removal of the axillary contents and of the pectoral fascia. It was not, however, till the researches of Heidenhain, and subsequently of Stiles and others in this country, that we knew exactly how the disease extended, or, indeed, how extensive the mammary gland itself was. As the result of these researches, we now know that by the older methods of operating, and, indeed, by any method which does not take proper cognisance of the facts which these recent researches have brought to light, the patient never really has a chance of cure, properly speaking, and the wonder is not that recurrence so constantly takes place, but that in any cases apparent cure follows. Where a cancer returns after an operation it of course means that the operation has not been sufficiently extensive to take away all the previously existing disease, and it is only what one would expect that with imperfect removal the likelihood of recurrence should be very great. Of course, one cannot remove the internal metastatic deposits, and they may be, and often are, present at the time of the operation without having as yet given rise to any symptoms; but, on the other hand, the local return must be looked upon as the fault of the surgeon in not taking away enough of the tissue. No doubt in many cases this is a fault which is quite unavoidable owing to the excessive and undiscoverable dissemination of the disease; but improvement in the results can only take place if we put the blame of the local recurrence on the operator, for just as we must assume at the present day that suppuration or the occurrence of septic disease after an operation through unbroken skin is entirely the fault of the surgeon, so it must be admitted, though not by any means to such an extreme extent, that a recurrence in the track of an operation wound or in the neighbouring glands also implies an imperfect operation.

Before going on to discuss the results of operation for cancer of the breast I must very shortly indicate the sort of procedure which I think is necessary, and as I have already written on this subject I need not go at all fully into details. Knowing the very early period at which the cancer cells get into the lymphatic vessels, an operation to be at all complete must include the primary disease, the lymph channels leading from it, and the whole mass of the nearest lymphatic glands. It does not, however, follow that when these glands are enlarged it is not absolutely necessary to go beyond the first group because, for a time at any rate, the disease seems to be held back at that point; but, as I say, the minimum operation for cancer which will offer anything like a real chance of cure must take away everything up to, and including, the first chain of glands. Hence, in the case of the breast we must remove the primary disease, the whole breast the tissue in which the lymphatics run from the breast to the axilla, and the whole of the axillary glands. In this connexion we must remember that recent researches have shown that the breast is a very much more extensive organ than was formerly supposed, and that by the old method of operating practically only the central part was taken away. Lobules of the breast run in the fat over the pectoral muscle nearly up to the clavicle, well into the axillary line, almost on to the sternum, and downwards on to the origin of the abdominal muscles. In the deeper part, also, the lobules of the breast are intimately connected with the pectoral fascia, and the removal of the breast without simultaneous thorough removal of the pectoral fascia inevitably means that numerous lobules are left behind. Hence our skin incisions must be very much more free than formerly was the rule, and for my own part I always take away the skin coextensive with the prominent part of the organ. There is another reason for taking away this large amount of skin—namely, the existence of the suspensory ligaments of the breast, in which lymphatic vessels run from the organ to the skin, and these are not at all infrequently infected with cancer cells. In addition to this portion absolutely taken away, the skin all around must be raised, leaving fat and lobules of the breast, as high as the clavicle, as far inwards as the middle of the sternum, downwards on to the abdominal muscles, and outwards on to the latissimus dorsi, and one advantage of this free undermining of the skin is that in the great majority of cases one can subsequently bring the edges together by means of stitches. Where the tumour is situated towards one side of the breast additional portions of skin must be taken away in a V-shaped manner, so that all the skin from the vicinity of the disease is removed. The skin flaps being held up, the pectoral muscle must be exposed at the upper part, and then, in order to ensure the removal of the fascia, a layer of the whole surface of the muscle must be taken away, and when the lower and outer edge of the pectoral muscle is reached the fascia over the serratus magnus and the whole fatty tissue containing lymphatics, as

far back as the edge of the latissimus dorsi, must be detached. In this way the primary disease, the breast, and the lymphatic vessels running in the fat and pectoral fascia towards the axilla are separated, and then one proceeds to clear out the whole contents of the axilla, finally leaving the nerves and vessels thoroughly cleaned, as in an anatomical dissection. One first follows the fat and fascia running between the pectoralis major and minor on to the costo-coracoid membrane; and then I explore the axillary vein at the lower part and tear open its sheath along its whole length. Then, raising the pectoralis minor, I begin at the very apex of the axilla right up under the clavicle, and with a curved blunt instrument (the one I find most useful is a periosteum detacher invented by Dr. Greville Macdonald for operations on the nasal septum), and the finger detach the whole fat and included glands and lymphatic vessels till everything except the important structures in the axilla has been got away. It is very important also that the whole tissue should be removed in one piece; in the first place it is of great advantage in clearing the axilla to have the parts dragged down by the weight of the breast, and in the second place it is very important not to cut through tissue which may be actually diseased, and which may lead to subsequent infection of the wound, as might be the case were the mamma taken away in the first instance and the axillary tissues removed subsequently. And this risk of soiling of the wound is no imaginary one; had I time I could bring forward evidence to show that recurrence may be due to this cause, and that if it can possibly be avoided a malignant tumour should not be cut into, and on no account should it be removed piecemeal, as is sometimes done in other parts of the body.

This operation is, in my opinion, the least extensive which ought to be done, even in a simple case, if the object is to cure the patient, but it must be modified and extended in most instances according to circumstances. Where the skin is much tacked down over the tumour, although it may not be actually involved in the disease, the cutaneous lymphatic vessels and those running in the suspensory ligaments are apt to be affected over a wide area, and hence it is necessary in such cases to cut exceptionally wide of the disease. Where the tumour itself actually involves the skin, however, we know that the disease has almost certainly spread widely in the cutaneous lymphatic plexus, and in such a case one must not hesitate to remove the skin extremely freely and to leave a wound the edges of which it may not be possible to bring together. If such a wound is left it can very readily be closed by skin grafting, either at the time of the original operation, or if the patient is too exhausted about ten days or a fortnight afterwards.

Where the tumour is adherent to the pectoral fascia, as is very commonly the case, I think it is advisable to take away the whole thickness of the muscle at that part, and as the lymph tends to be forced onwards in the direction of the muscular fibres the mass of muscle removed should be detached along its whole length, from its origin to its insertion. In operating on such cases, as I approach the neighbourhood of the tumour I usually sink my hand through the muscle and then rapidly separate the part grasped from origin to insertion, and detach it at both ends, and, as a matter of fact, in many of my cases I have done this and have thus removed a considerable part of the lower portion of the pectoral muscle. Halsted and others advise that the pectoral muscle, at any rate its sternal origin, should be taken away in every case, partly in order to get thoroughly rid of the pectoral fascia and partly in order to be able to clear out the axilla more effectually. As will be evident when I come to compare my statistics with Halsted's, this is really not necessary unless there are actual nodules in the substance of the muscle, more especially where the lower portion of the muscle is removed in the manner I have described there is no difficulty whatever in pulling up the remains of the pectoral muscle sufficiently to obtain complete access to the upper part of the axilla.

Where the muscle itself is actually diseased—that is to say, where there are one or more nodules in the muscular substance—it has been pointed out by Heidenhain that the whole muscle must be looked on as infected, for the muscular contractions very quickly distribute the contents of the lymphatic vessels over it. He therefore advises complete removal of the pectoralis major under these circumstances. I am inclined to think, however, that even in these cases it is often sufficient to take away the sternal origin of the muscle, and that the clavicular portion may be left unless there is actual disease present in it. The connexion between the two portions is not very intimate, and from a functional point of view it is of great importance to leave the clavicular part.

Where the glands in the axilla are markedly enlarged the question arises as to how far one should go. In the first place, under such circumstances, it is certainly well to see what one is doing, and while if the pectoral muscle is not affected at all I prefer leaving it, I think it is well to divide it transversely and after the operation to stitch it up. The chief question, however, which has to be considered is whether, having found the higher axillary glands enlarged, one ought not to go further and remove the glands from the posterior triangle of the neck. Some have, indeed, tried to make it a universal rule that if the axillary glands are at all enlarged those in the posterior triangle must also be taken away; but, as I have already said, the first chain of glands opposes a barrier for a considerable time against the onward spread of the disease, and if only it is thoroughly removed I think one may in most cases be content. Where the cancer is a slow-growing one and only the lower axillary glands are noticeably enlarged I do not, therefore, open up the posterior triangle of the neck, and, so far as I can recall, I have only twice had recurrence in the supra-clavicular glands. If, however, the highest axillary glands are noticeably affected, it stands to reason that the posterior triangle of the neck should be opened. Unfortunately, however, in these cases the line of infection does not so much run into the posterior triangle as along the subclavian vein into the thorax along a route that is only imperfectly accessible even when the posterior triangle is opened, and I have not seen much benefit in the way of finding and rooting out disease as the result of opening up the posterior triangle. Mr. Arbuthnot Lane apparently advocates division of the clavicle and clearing out the supra-clavicular glands in all cases, but this is a method which I cannot at all agree with, and I think that my results bear me out; and where the disease is noticeable in the supra-clavicular glands I believe that cure is hopeless. Some have also advocated amputation at the shoulder-joint with the view of removing the axillary disease still more thoroughly, and this was first done by Sir Joseph Lister, partly at my own instigation. I do not, however, believe that when the disease has gone so far as to necessitate such a procedure there is the slightest probability of curing the patient. The conditions under which amputation of the arm would be necessary are the presence of a large mass in the axilla involving the nerves, for involvement of the vein or the artery, or even of both, does not necessitate amputation. I have on more than one occasion removed portions of the axillary vein to which glands were firmly adherent, and in one case I removed both vein and artery without any loss of vitality or other trouble in the limb; but where the disease is so diffuse as to involve the nerves I think it may be taken as certain that it has extended beyond reach.

As regards the limits of operation for cure in breast cancer, therefore, I would exclude from operation (1) cases of cancer *en cuirasse*; (2) cases where there is a large mass in the axilla involving the nerves; (3) cases where large glands can be felt above the clavicle; and (4) all cases where secondary cancers already exist elsewhere. In none of these instances is there any reasonable prospect of cure; and there will be but little to be gained by subjecting the patient to the elaborate operations to which I have referred. Short of these conditions, however, I think a patient ought to have the chance of operation, and though, as I have said before, I would not urge it in bad cases I think she should be allowed to choose. Even where the operation fails to cure, the prolongation of life is often marked, much more so after these thorough operations than after the ordinary imperfect procedure. In this list I have not included cancerous cachexia, as is usually done, because it seems to be due to absorption of products from the cancerous growth, and does not necessarily imply a general internal infection. I have repeatedly seen patients with marked cancerous cachexia improve immensely after the operation.

In considering the results of former and recent methods of operation for cancer of the breast we may look either at the question of cure or at that of local recurrence, and the most satisfactory conclusion is, I think, obtained when we take both together; indeed, since the most recent views have influenced practice the time is too short for the accumulation of any large statistics as regards cure, and one must therefore judge of the effect to some extent by considering the

TABLE I.—ALL THE CASES OF CANCER OF THE FEMALE BREAST SINCE 1890 (VERIFIED BY MICROSCOPICAL EXAMINATION) IN WHICH THE FIRST OPERATION WAS PERFORMED BY MR. WATSON CHEYNE.

A.—Cases where Three Years at least have Elapsed since the Operation.

No.	Age.	Date of operation.	Disease noticed for about—	Seat and extent.	Nature of operation.	Results up to February, 1896.		
						External recurrence.	Metastatic deposit.	No recurrence as yet.
1	52	21/1/90	2 years ...	Nodule, size of walnut; numerous small, hard glands.	Usual	No	No	Well, 6 years later. Cured.
2	47	11/2/90	2 years ...	Large tumour; glands small; marked cachexia.	Usual	?	Abdominal swelling developed 9 months after operation. Died 21 months after operation.	
3	40	25/3/90	1 year... ...	Large tumour, above and internal to nipple, adherent to skin and muscles. Glands.	Usual and portion of pectoral muscle.	In 6 months. Nodules on rib.	Probably mediastinal growth.	
4	38	20/5/90	2 months ...	Largish mass above nipple. A good many glands.	Usual	No	No	Well, 5 years 9 months later. Cured.
5	50	4/11/90	Paget's Eczema 2½ years. Tumour in breast noticed for 6 months.	Elongated mass external to nipple, adherent to skin; nipple retracted, flattened, and eczematous. Glands in axilla.	Usual	No	No	Well, 5 years and 3 months. Cured.
6	47	14/2/91	2 years ...	Tumour adherent to skin; glands affected, but not very large.	Usual	No	No	Well, 5 years. Cured
7	49	24/2/91	9 months ...	Marked general enlargement of breast. Extensive glandular affection. Marked cachexia. Very bad case.	Usual. Very large amount of skin removed. Skin grafting.	No	Lungs. Died in about 18 months.	
8	33	24/3/91	1 year ...	Large mass in outer side of breast. Large glands. Very weak. Cachexia.	Usual. Large amount of skin. Skin grafting.	Small nodule in skin near angle of scapula. Excised, 24/3/92. No further local recurrence.	Masses in abdomen (? ovary). Died, 17/2/93.	
9	52	31/3/91	Nearly 2 years ...	Ulcerated tumour below and outside nipple. Glands enlarged, but not big.	Usual	No	No	Lived 3 years and 6 months, then died of acute bronchitis. No return. Cured.
10	46	22/10/91	Some months ...	Diffuse. Skin involved. Glands. Nodules found in fat on operating.	Usual	Recurrence in skin in 8 months.	Died of cancer of pleura 14 months after operation.	
11	63	23/10/91	18 months...	Small, diffuse tumour. Glands.	Usual	No	No	Well, 4 years and 3 months. Cured.
12	44	3/11/91	6 months ...	Large mass in breast. Glands: one large one.	Usual. Glands removed from posterior triangle.	Recurred?	... ...	Well, 2 years and 2 months later; recurred and has been again under treatment elsewhere last year.
13	56	27/11/91	3 years ...	Size of hen's egg. Glands considerably enlarged. Atrophic scirrhus.	Usual	No	No	Well, 4 years and 2 months. Cured.
14	62	9/12/91	3 years ...	Gland a good deal shrivelled, skin adherent, not ulcerated; numerous small hard glands. Atrophic scirrhus.	Usual	No	No	Well, 4 years and 1 month. Cured.
15	49	12/12/91	10 months...	Tumour, size of pigeon's egg, on outer side of nipple. Adherent skin. Glands affected, but not very large.	Usual	No	No	Well, 4 years and 1 month. Cured.
16	59	15/3/92	9 months ...	Large mass over upper and outer quadrant. Skin adherent and red. Glands.	Usual, but very extensive removal of skin at the outer part.	No	No	Well, 3 years and 10 months. Cured.
17	63	31/5/92	2 years ...	Large mass towards axillary part of breast, adherent to skin. Glands enlarged.	Usual	No	Deposit in lower part of spine. Much pain in back and leg. Died 21 months after operation.	
18	43	27/9/92	6 months ...	Extensive hardness of upper and outer quadrant. Enlarged glands in axilla and puckering of skin over the lower ones. Glands in supra-clavicular fossa; very bad case.	Usual, but very extensive. Glands removed from above clavicle.	Local recurrence. Seen about a year afterwards. Inoperable.		

TABLE I.—ALL THE CASES OF CANCER OF THE FEMALE BREAST SINCE 1890 (VERIFIED BY MICROSCOPICAL EXAMINATION) IN WHICH THE FIRST OPERATION WAS PERFORMED BY MR. WATSON CHEYNE.

A.—Cases where Three Years at least have Elapsed since the Operation—Continued.

No.	Age.	Date of operation.	Disease noticed for about—	Seat and extent.	Nature of operation.	Results up to February, 1896.		
						External recurrence.	Metastatic deposit.	No recurrence as yet.
19	42	12/12/92	3 months ...	Mass in upper and outer quadrant. Skin puckers, but is not involved. Glands involved, but not large.	Usual; a good many glands affected.	No	No	Well, 3 years and 1 month. Cured.
20	57	7/1/93	4 months. Cyst (in degenerating cancer?) opened & drained by another surgeon.	Diffuse soft cancer of breast; a good many glands. Sinus leading into the breast. Skin adherent all over; very bad case.	Extensive operation; portion of pectoralis major removed.	Recurred in lower remaining part of pectoralis; about 18 months later removed; again recurred towards upper part of axilla and removed. Now again recurred at root of neck, and inoperable. Still alive.		
21	43	21/2/93	Nearly a year.	Tumour involving greater part of breast and adherent to the skin and deeper parts. Glands infected, but not large.	Usual, and part of pectoralis major.	No	No	Well, almost 3 years. Cured. (I have included this case because it only wants a few days till the completion of the 3 years' limit, and it is certain that it will not recur in that interval.)

Total, 21 cases. No deaths from the operation.
12 cured—i.e., well for more than 3 years.
9 recurred { 5 external recurrences, 3 of them with metastatic deposits as well.
1 recurrence (? external).
3 metastatic deposits without external recurrences.
In percentages, 57 per cent. cured and 42·8 per cent. recurred.
The patients "cured" have lived 6 years, 5 years 9 months, 5 years 3 months, 5 years, 4 years 3 months, 4 years 2 months, 4 years 1 month (2 cases), 3 years 10 months, 3 years 1 month, and 3 years; one died—well 3 years and 5 months after the operation.

B.—Cases where Three Years have not yet Elapsed since the Operation.

22	47	19/4/93	Glands first noticed 4 months ago, then found tumour in breast.	Extensive mass in centre of breast. Glands in axilla enlarged.	Usual	In 4 months. Died 10 months after operation.		
23	60	1/5/93	7 months; rapidly increasing.	Large mass in upper and outer quadrant of the breast. Puckering of skin. Extensive glandular enlargement.	Usual, and sternal origin of pectoralis major and the pectoralis minor.	Recurred 3 months later in skin around and developed into a cancer *en cuirasse*.		
24	76	9/5/93	6 months ...	Large mass in axillary portion of breast, adherent beneath. Glands.	Usual, and part of pectoralis major.	No	Died 6 months later from intestinal obstruction. (? Tumour in abdomen.) No post-mortem examination.	
25	62	17/7/93	2 years ...	Large hard mass beneath left nipple, adherent to skin, and parts behind. Glands in axilla.	Usual, and part of pectoralis major.	... ...	... ...	Cannot trace case.
26	47	11/10/93	Has had some induration of breast since a blow six years ago. For last 2 years swelling has increased.	Hard mass in inner half of breast, adherent to skin. Enlarged glands in axilla.	Usual. Had to skin graft part of incision.	No	No	Well, 2 years and 3 months.
27	50	4/11/93	Some months.	Diffuse hardness of upper part of breast. Glands.	Usual	No	No	Well, 2 years and 3 months. In September, 1894, there was a good deal of swelling of the arm, and as it did not go down I opened up the axilla in November, but found no disease.

TABLE I.—ALL THE CASES OF CANCER OF THE FEMALE BREAST SINCE 1890 (VERIFIED BY MICROSCOPICAL EXAMINATION) IN WHICH THE FIRST OPERATION WAS PERFORMED BY MR. WATSON CHEYNE.

B.—Cases where Three Years have not yet Elapsed since the Operation—Continued.

No.	Age.	Date of operation.	Disease noticed for about—	Seat and extent.	Nature of operation.	Results up to February, 1896.		
						External recurrence.	Metastatic deposit.	No recurrence as yet.
28	45	27/12/93	2 months ...	Lump below and external to nipple; skin not involved. Glands.	Usual, and lower part of pectoralis major.	... ...	... ...	Lost sight of.
29	69	24/1/94	15 months...	Mass size of orange behind and to inner side of nipple. Skin adherent and red. Mass in axilla. As it turned out, an inoperable case.	Usual, and pectoralis major. Was unable to remove axillary mass as it extended high up and involved all the structures.	Recurred locally and in axilla within a year.		
30	52	7/3/94	6 months ...	Mass below and internal to left nipple; adherent to skin. Glands in axilla.	Usual	No	No	Well, 1 year and 11 months.
31	48	7/3/94	2 years ...	Upper and inner quadrant of right breast. Small lump adherent to skin and pectoral. Glands in axilla.	Usual, and portion of pectoralis major.	No	No	Well, 1 year and 10 months.
32	45	21/3/94	1 month ...	Mass behind nipple. Marked retraction. Skin adherent. Glands.	Usual	No	No	Well, 1 year and 10 months.
33	51	1/4/94	?	Diffuse mass behind nipple. Skin adherent. Mass of glands in axilla.	Usual, and piece of pectoralis major.	No	Shortly afterwards began to complain of pain in the back and limbs, and gradually got weaker, and died about 15 months later. Probably recurrence in vertebræ. No post-mortem.	
34	47	18/5/94	3 months ...	Mass in middle of breast. Glands in axilla.	Usual	... ...	... ...	Died immediately after the operation. The ether led to a great secretion of mucus, and she seemed quite unable to get it up, and was very blue. I think she died chiefly of ether leading to filling of the bronchi with mucus which, owing to her collapsed condition, she was unable to cough up.
35	54	22/5/94	2 years ...	Large mass above left nipple. Skin adherent. Numerous glands in axilla.	Usual, and portion of muscle.	No	No	Well, 1 year and 8 months.
36	58	26/5/94	Cyst tapped 6 years ago. Some thickening remained. 6 months ago lump began to grow.	Large mass in upper and inner quadrant of left breast. Skin adherent. Glands in axilla and above clavicle.	Usual, and a good deal of pectoral muscle and glands above clavicle.	A year later further glands in neck removed. In September, 1895, recurrence in connexion with inner end of fifth rib removed. Still very well, but recurrence over rib.		
37	54	30/7/94	6 months ...	Large diffuse mass on outer side of left breast. Skin adherent. Numerous small hard glands.	Usual, and piece of pectoralis major.	No	No	Well, 1 year and 7 months.
38	58	29/8/94	5 months ...	Mass, size of hen's egg, in lower and outer part of left breast. Several nodules extending towards axilla, and enlarged glands there adherent to skin and muscle.	Usual, and lower part of pectoralis major.	On 24/4/95 a subcutaneous nodule over edge of latissimus dorsi removed.	Later recurred in abdomen. Died about 14 months after operation.	
39	About 50	6/10/94	9 months ...	Tumour in upper part of left breast. Some small glands.	Usual	No	No	Well, 1 year and 7 months.
40	62	17/10/94	4 years ...	Mass in upper part of right breast. Skin adherent and ulcerated. Several small glands.	Usual, and piece of pectoralis major.	No	No	Well, 1 year and 3 months.

TABLE I.—ALL THE CASES OF CANCER OF THE FEMALE BREAST SINCE 1890 (VERIFIED BY MICROSCOPICAL EXAMINATION) IN WHICH THE FIRST OPERATION WAS PERFORMED BY MR. WATSON CHEYNE.

B.—Cases where Three Years have not yet Elapsed since the Operation—Continued.

No.	Age.	Date of operation.	Disease noticed for about—	Seat and extent.	Nature of operation.	Results up to February, 1896.		
						External recurrence.	Metastatic deposit.	No recurrence as yet.
41	34	6/2/95	8 months ...	Hard mass on outer side of right breast. Adherent to skin and muscle. Enlarged axillary glands.	Usual, and a good deal of the pectoralis major.	No	While recovering from the operation she complained of much pain in her back (sacral region) and on inquiry we found that she had suffered from this for 4 months. She gradually lost flesh and died, after having much pain in the back, 6 months after the operation. Probably spinal deposit.	
42	48	17/4/95	5 months ...	Diffuse hardness on outer side of left nipple with retraction of nipple and much puckering and adhesion to the skin. Enlarged glands.	Usual, and lower part of pectoralis major.	No	No	Well, 9 months.
43	50	5/6/95	4 years ...	Atrophic scirrhus on right side. Skin adherent but not ulcerated. Glands slightly enlarged.	Usual	No	No	Well, 7 months.
44	33	5/6/95	5 months ...	Mass in upper and outer quadrant of left breast, adherent to skin and slightly to deeper parts. Glands small.	Usual	No	No	Well, 7 months.
45	54	14/6/95	3 months ...	Mass in outer and lower quadrant of left breast. Skin adherent. Glands enlarged.	Usual	No	No	Well, 7 months.
46	45	19/6/95	6 months ...	Tumour in left breast. Skin adherent. Glands small.	Usual	No	No	Well, 7 months.
47	46	3/7/95	10 months	Mass in outer side of right breast. Adherent to skin and also deeply. Glands enlarged.	Usual, and portion of pectoralis major.	No	No	Well, 6 months.
48	49	10/7/95	6 months ...	Mass on outer side of breast. Adherent to skin which was red. Enlarged glands.	Usual	No	No	Well, 6 months.
49	58	16/7/95	3 weeks ...	Mass on outer side of left breast. Adherent to skin. Enlarged glands.	Usual	No	No	Well, 6 months.
50	44	16/7/95	1 year ...	Mass in lower and outer part of left breast. Small glands.	Usual	No	No	Well, 6 months.
51	About 50	23/7/95	1 year ...	Hardness behind nipple and on outer side. Puckering of skin. Enlarged glands.	Usual	No	No	Well, 6 months.
52	51	29/7/95	18 months	Mass in outer side of left breast. Adherent to skin and pectoralis. Glands.	Usual, and piece of pectoralis major.	Nodules on ribs Jan., 1896; inoperable.		
53	56	21/8/95	2 months ...	Mass in outer part of right breast. Small glands.	Usual	No	No	Well, 5 months.
54	55	3/9/95	18 months	Largish mass in lower part of left breast. Marked glandular enlargement.	Usual	No	No	Well, 4½ months.
55	? 60	3/9/95	2 years ...	Atrophic scirrhus in left breast. Small glands.	Usual, and a good deal of pectoralis major.	No	No	Well, 4½ months.
56	45	26/9/95	6 months ...	Large mass in left breast. Extremely anæmic. Great menorrhagia. Glands: probably metastasis.	Usual, and most of pectoralis major and minor.	No	Healed well, but became gradually weaker, and died 3 months later. Nodules could be felt in abdomen. No doubt cancerous.	
57	59	13/10/95	Some months ...	Diffuse mass above left nipple adherent to skin. Large glands in axilla. Bad case.	Usual	No	No	Well, 3 months.

TABLE I.—ALL THE CASES OF CANCER OF THE FEMALE BREAST SINCE 1890 (VERIFIED BY MICROSCOPICAL EXAMINATION) IN WHICH THE FIRST OPERATION WAS PERFORMED BY MR. WATSON CHEYNE.

B.—Cases where Three Years have not yet Elapsed since the Operation—Continued.

No.	Age.	Date of operation.	Disease noticed for about—	Seat and extent.	Nature of operation.	Results up to February, 1896. External recurrence.	Metastatic deposit.	No recurrence as yet.
58	55	16/10/95	7 months ...	Tumour in lower and inner quadrant of left breast, adherent to skin and slightly to deeper parts. Enlarged glands.	Usual	No	No	Well, 3 months.
59	47	3/11/95	9 months ...	Small cancer in breast. Small glands.	Usual	No	No	Well, 2½ months.
60	39	28/11/95	6 months ...	Tumour diffuse, especially at upper part of right breast. Numerous glands. Bad case.	Usual	No	No	Well, 2 months.
61	32	5/12/95	3 weeks ...	Small cancer at axillary end of left breast. One enlarged gland. Quite early case. Very bad family history.	Usual	No	No	Well, 1½ months.

Total number of cases where 3 years have not yet elapsed since the operation = 40, of these—

1 died of the operation.
2 have been lost sight of.
27 have had no recurrence as yet.
10 have shown further disease { 6 recurred locally; in one (No. 29) visible disease left behind. 4 had metastatic deposits alone; one of these (No. 56) was really an inoperable case, and in one case (No. 24) I only assume that there was an internal deposit.

In percentages, 67·5 per cent. remained well and 25 per cent. recurred.
The total is 61 cases. In 39, no recurrence = 63 per cent. In 19, recurrences or metastatic deposits = 31 per cent.
Excluding the cases operated on during 1895, which may be said to be too recent, we have 40 cases, of which—

21 remained well = 52 per cent.
16 have shown further signs of cancer = 40 per cent.; one of these (No. 29) was really inoperable, and in one (No. 24) I am not sure whether there was a deposit or not.
2 have been lost sight of.
1 died after operation.

One other interesting calculation is to follow those cases which lived for a year after operation without further sign of cancer (thus showing the chances of a patient where a year passes without recurrence) = 25 (including 2 recurrences about which I am not sure) of these—

20 remained well.
1 died—well after more than 3 years.
4 showed further signs of cancer (Nos. 7, 12, 17, and 20), but in two of these (Nos. 7 and 17) the recurrence may have been noticed before the end of the first year.

This shows that the chance of recurrence is very slight if a patient is absolutely well after a year.

TABLE II.—STATISTICS OF BREAST OPERATIONS.

Operator.	Total cases.	Mortality.	Known recurrences or deaths from metastases.	Cures.	Cases done more than 3 years before the report. Total.	Mortality.	Recurrences (or metastatic deposits).	Cures.
		Per cent.	Per cent.	Per cent.		Per cent.	Per cent.	Per cent.
Fischer (Henry)	147	20	55	8	86	22	59	15
Esmarch (Oldekop)	229	10	44	10	171	13	(?)	14
Before 1863	—	—	—	—	47	—	—	4
After 1863	—	—	—	—	124	—	—	18
Rose (Fischer)...	61	26·3	(?)	6	—	—	—	—
Billroth (Winiwarter)	143	23·7	62	5	89	22	68	9
Trendelenburg (Neuendorff)	97	11	54	2	50	12	68	4
Lücké (Dietrich)	110	7·6	(?)	9	69	8	60	13
Czerny (Schmidt)...	150	4·4	(?)	5	82	6	46	8·5
Krönlein (Horner)	144	4	58	18	121	4	68	20
Küster (Schmidt)	222	10·8	(?)	9	132	14	(?)	15
König (Hildebrand)	135	—	—	17	118	9	61	20
Bergmann (Eichel)	114	4·3	62	11	43	7	62	30
Mitchell Banks	82	12	26·8	21·9	—	—	—	—
Halsted	50	0	43	4 or 8	11	0	54	18-36
Watson Cheyne	61	1·6	31	19·9	21	0	42·8	57

question of recurrence. As regards cure, I have adopted Volkmann's three year limit, and include under cures all cases which for a period of three years or longer after the operation have had no local recurrence and have shown no sign of internal cancer. Although this three-year period is, as I have already said, not absolutely accurate—for a certain, though small, proportion of patients who have been alive and well at the end of three years have yet died of cancer—nevertheless it is near enough for all practical purposes, and even if we only secured the patient three years of complete freedom from disease such a gain would fully justify the most radical operation. As regards the question of local recurrence it will be seen that a very marked change has been produced by recent methods of operating. Formerly local recurrence was—and even now it is—extremely frequent (Gross puts it at 68·80 per cent., and that is not including the cases which have been lost sight of, probably many of which have also recurred). In considering this question of local recurrence it must also be remembered that up till recently half of these local recurrences took place during the first three months after the operation and over 80 per cent. during the first year. Halsted has drawn a distinction between what he terms local recurrence and regional recurrence. By local recurrence he means recurrence actually in the track or area of the wound, and by regional recurrence he implies recurrence in the neighbourhood or in glandular areas which were not included in the first operation. Such a distinction is, however, extremely difficult to carry out, and it must often be impossible to determine whether a particular nodule has appeared in the track of the former operation or in its immediate vicinity. As a matter of fact, Halsted's regional recurrences imply an imperfect operation just as much as his local recurrences do; they simply mean that the operation has not been sufficiently extensive—no doubt in many cases because it was impossible. Hence I prefer to group both these so-called local and regional recurrences together under the heading of external recurrences and in my own statistics I speak of two sets of recurrences—namely, external recurrences in the wound, its vicinity, or the glands, and internal or metastatic deposits.

Cases of cure of cancer of the breast by operation were very rare in former times, and even at the present moment it is with many not so much a question of cure as one of prolongation of life: if cure happens to take place it is a lucky and a more or less unexpected result. The prolongation of life by the old operation is variously estimated at from eight to thirteen months, but this is really longer than it should be by reason of the fact that some of the patients have lived several years and have thus raised the average. Excluding cases which have passed beyond the three-year limit, I do not think that the prolongation of life by the old imperfect operation is on an average more than from six to eight months, though at the present time where recurrence takes place after the more thorough operation this prolongation seems to be considerably increased.

In looking back over old literature one is very much struck by the great rarity of cure and the very desponding view which surgeons took of the chances of permanent freedom after operation. Velpeau only knew of twenty cases which had been cured, and it is by no means certain that all of these were cases of cancer. Many of the older surgeons state that they have not known a single instance of cure. According to Henry, Benedikt of Breslau only operated eight times in eighteen years, and during the last seventeen years he did not operate upon breast cancer at all; he considered from his own experience and that of others that the chance of cure was so extremely remote that he was not justified in subjecting the patients to the risks of the operation, which were at that time considerable. Von Winiwarter in publishing, in 1878, Billroth's results—viz., eight cures in 143 cases—says that this result is surprisingly good, and that no such favourable statistics had up to that time been published.

I need not recapitulate here the details with regard to various statistics, but I have in Table II. put together results which I have worked out from papers published from various cliniques; and in Table I. I publish all the cases on which I have myself operated since the beginning of 1890, at which time I obtained beds at the hospital and began to operate in this thorough manner. I would lay stress on the fact that my cases have been in no way selected, only cases of the kind previously referred to having been refused operation. Many of them were very advanced and would have been refused operation by those who select their cases, and, I may add, that in all of them I have found disease in the axillary glands. I may say also that all my cases were subjected to microscopical examination, so that there is no question as to the diagnosis in these instances.

With regard to the various statistics which have been published, there is one very curious fallacy which has cost me a great deal of time and trouble to rectify in preparing Table II., and it is this—the total number of cases operated upon is given, and the cures have been calculated in reference to the total number, quite irrespectively of the fact that in some the operations had been quite recently done. For example, taking the first line we have the total number of cases given as 147, and the cures as 8 per cent., but then a very considerable proportion of these cases had been operated on within three years of the publication of the statistics, and none of these could by any possibility have lived three years. It is necessary, therefore, in order to study the results of cure according to the three-year limit, to exclude all those cases in which the operation was done within three years of the publication of the report. Thus, in the first line, we have to exclude no less than 61 cases, and when the number of cures are reckoned in proportion to the remaining 86 cases, we have the percentage at once raised from 8 to 15 per cent. Some exclude the deaths also, but this is not quite fair, as the patient wishes to know the chances, death, &c., included. Their exclusion would make it appear that an individual patient has a much better chance of cure than is really the case. Further, a considerable number of these cases were lost sight of, and most writers exclude them also, but that I have not done, because it is highly probable—certainly from my own experience—that most of the cases of operations on cancer which are lost sight of either die or recur, and if they recur, knowing that the disease is cancer, the patients either decline to consider a second operation or believe that a second operation is hopeless, and, therefore, do not show themselves again. It may be noted in Table II. that the percentages given by me do not correspond with those in the original papers, and that is mainly because the authors excluded the cases lost sight of, and thus got a better percentage result. I think that the second column, which takes into account all the cases which were operated on up to within three years before the publication of the report, represents fairly accurately the proportion of cures in the hands of these particular surgeons.

The study of Table II. fully justifies, I think, what I have said as to the necessity for extensive operation and the advantages to be derived from it. Contrast the older results from Trendelenburg's with 4 per cent. of cures to Fischer's with 15 per cent., or taken altogether an average of about 10 per cent., with the more recent results, varying from 15 per cent. in Küster's practice up to 57 per cent. in my own, and we see that, as the result of greater care in operating, the chances of cure have been largely increased, and the recent results in this table ought to be really better, for a little study of the methods employed by some of the surgeons in the more recent period shows that even there the operations were not so complete as could be wished. The value of even an imperfect improvement is well shown in Esmarch's results, for during the first period up to 1863, the old plan of operating was employed with only 4 per cent. of cures; while afterwards the axilla was cleared out more or less thoroughly, with a jump at once to 18 per cent.—a result more than four times better.

Looking at my own results it will be seen that the effect of thorough removal of the disease is very marked indeed. Taking the cases which have been operated on in the manner described up to three years ago, 21 in number, we have no deaths—12, or 57 per cent. of cures, and 9, or 42·7 per cent., of cases recurring either externally or internally. And if it is objected that 21 is a small number of cases to argue about, I would point out that 12 cures are more than can be shown by many of the older surgeons, although their cases exceed 100. Again, if we study my results from the point of view of the return of the disease, taking in the recent cases, we have a total of 61 cases, with 19, or 31 per cent., of recurrence of metastatic deposits, and among those recurrent cases were two (Nos. 29 and 56) which were really inoperable (in one case, indeed, visible disease being left behind), and which only raise the percentage of failures unnecessarily, and also included in these is one case (No. 24) in which I only assume that there was a metastatic deposit, but have nothing

but suspicion to go upon. Excluding the two cases (Nos. 29 and 56) as being inoperable cases, as is usually done in the statistical reports I have quoted, we have 59 cases operated on with reasonable hope of cure, with 16 certain recurrences, or 27 per cent. Some of these, it is true, have only been operated on quite recently, and they therefore are not of much value, although it must be remembered that by the older methods local recurrences in half the cases took place within three months of the primary operation. At the same time, let us exclude the cases operated on during the last year (and, as I have previously mentioned, over 80 per cent. of the recurrences take place during the first year after operation), I say excluding the cases operated on during the last year we are left with 40 cases, with, at the very worst, 16, or 40 per cent., internal or external recurrences, and that is including Nos. 24 and 29. Taking the external recurrences alone, we have in the 61 cases only 11 external recurrences (again including No. 29), or possibly 12, giving an average percentage of external recurrences of 18 per cent. or 19 per cent. As regards the 12 cured cases, of course, recurrence may still take place in some, but taking the most unfavourable statements—viz., König's—that 15 per cent. recur even after three years, we would still be left with 9 cures (and that is leaving out also Case 9 which died without recurrence after three years), or 42 per cent. of definite cures, a result far superior, however it is worked out, to that obtained by the ordinary operation.

I have already referred to Halsted's paper (which up to the present has shown the most favourable results as regards recurrences), and he points out that in his 50 cases he has only had 3 local recurrences; but he has also had 8 regional recurrences, and, as I have already said, I think it is much fairer to combine his local and regional recurrences under one heading, "external recurrences," as I have done in my own statistics, and this gives him a percentage of 22 per cent. external recurrences. Contrast the results as regards external recurrence obtained by Halsted (22 per cent.) and myself (18 per cent.) with those of surgeons operating less completely as worked out by Halsted; for example, Billroth, 85 per cent.; Czerny, 62 per cent.; Fischer, 75 per cent.; Gussenbauer, 64 per cent.; Volkmann, 59 per cent., &c.; and the difference between the old imperfect operation and the thorough one becomes most striking.

While the results, as I have pointed out, are steadily improving, the proportion of cases which succumb to cancer is still considerable, and will not, I think, be much reduced till patients and medical men understand that there is a good chance of radical cure from early and thorough operation in mammary cancer, and that a suspicious lump in the breast, especially in elderly women, is not a thing to be watched, for I may say that over 90 per cent. of the swellings of the breast in elderly women are cancerous. Contrary to the usual dictum it is now found that the most favourable of all cases for operation are those of atrophic scirrhus, and the more nearly a cancer approaches the atrophic form, the greater is the chance of permanent cure; indeed, I believe that the malignancy of the cancer in the individual cases has a great deal to do with the result of operation, indeed, possibly more than the early period of the operation, but that, expressed in other terms, is only to say that in the less malignant forms of cancer the disease does not diffuse itself so rapidly or widely, and that by an extensive operation we have a better chance of getting beyond it. A patient who comes with a small tumour which has been noticed for several months, which has not markedly increased in size, and in connexion with which we have only small glands in the axilla, has a much better chance than one who has found a tumour quite recently, which is noticeably enlarging and in which the axillary glands are of considerable size. In the former case the probability of getting beyond the disease is great on account of its slow spread; in the latter the reverse is the case. Hence, while the sooner a cancer of the breast is radically removed the better, one cannot say that the chance of cure is necessarily proportionate to the early period of the operation; in any case, however, the chance of cure of necessity depends on the thoroughness of the operation.

I need not enter at length into the objections which are urged to these thorough operations. They are usually brought forward by those who only operate with the hope of adding a few months to the patients' life, and not of curing the disease. I may, however, only refer to the one question of mortality. Formally the mortality was great and was much increased by opening the axilla, and this was due to sepsis. As that is avoided nowadays, we may safely conclude that when the argument of mortality is brought forward the arguer does not keep his wounds aseptic. Halsted in his 50 cases has had no deaths; in my 61 cases I have had 1 death with which probably the ether had as much to do as the operation. In fact I think shock is practically the only risk which we have to face, and there is no question that the patients do suffer a considerable amount of shock in some cases. On this point I cannot agree with Halsted, who minimises the risk from this cause. In addition to shock, more than one writer has referred to pneumonia as occasionally occurring, possibly from long exposure in a cold room in the case of predisposed individuals, and I had this experience in one case where I performed an extensive operation for recurrence, the primary operation having been done by another surgeon. As regards the question of functional disability which is also sometimes brought forward, there is really comparatively little after-trouble. At first, no doubt, the patient finds that the movement of the arm is very considerably impeded, but as time goes on this becomes more free, and ultimately as a rule the patient is able to do most things which she wishes. After all, even if the arm were permanently useless, it would be a comparatively small price to pay for life. Mr. Butlin is, as is well known, one of the chief opponents in this country of these thorough operations, and since I have written these lectures I have looked into his book on the operative surgery of malignant disease. While I find that some of his views are similar to those at which I have arrived, I have been much startled at several of his dicta, more especially with regard to malignant disease of the breast. Thus he seems to consider it sufficient in some cases where the tumour is quite small to remove it alone without taking away the rest of the breast, because he sees no reason why fresh disease will necessarily break out in the part left behind. But the entire removal of the breast is advocated, not, as Mr. Butlin appears to imagine, so much on account of a degenerative pre-cancerous condition of the rest of the organ, which will subsequently manifest itself by a fresh cancerous growth, as from the purely anatomical reason that the main lymphatic vessels of the breast run towards the nipple, as has been shown by Sappey, before they go on to the axillary glands, and, as the cancer cells very early get into the lymphatic vessels, there is the greatest probability that if the tumour alone is removed cancer cells will be left behind in other parts of the breast. Again, Mr. Butlin does not think that it is necessary to remove the lymphatic glands unless they are noticeably enlarged, nor does he apparently lay any stress on the removal of the intervening lymphatic vessels. That cancer cells do not often stick in the larger lymphatic vessels is quite true, nor do I hold that it is necessary in all parts of the body to remove all the tissue between the primary growth and the nearest glands, but in the case of the breast we have ample evidence of this necessity as regards the lymphatic vessels in the pectoral fascia which are so frequently plugged with cancer cells; and as regards the lymphatic glands they come lower down in the axilla than is generally supposed, and are very apt to be overlooked unless the continuity of the breast and glands is maintained. That in quite early cases these glands may not be infected is, of course, probable; indeed, several instances of cure have occurred where the breast alone has been removed. This, however, very seldom happens, and to refuse to remove the axillary glands because it may not be necessary in a few very exceptional instances is, to my mind, quite illogical. It is surely better that these few patients should lose their axillary glands unnecessarily than that in the case of the great majority disease should be left behind. As a matter of fact, as cases usually come into the surgeon's hands it is very rarely indeed that the disease has not attacked the glands although they may not be noticeably enlarged before the operation, and in every one of my cases some at any rate of the axillary glands have been diseased. Hildebrand states that in 26 out of 135 cases which he publishes from König's clinique no enlarged glands could be felt before the operation. In 13 of these cases the breast alone was removed with 3 cures, while in the other 13 the axilla was also cleared out with 6 cures. Mr. Butlin's conclusion, based on these views, is to the following effect: "We may regard operations for the removal of mammary cancer as successful in effecting a complete cure in rather more than 10 per cent. of all cases treated. I believe that a

percentage of 12 to 15 is nearer the truth." Contrast this with the 57 per cent. of cures which I have obtained with the more thorough operation.

I have previously mentioned several cases in which I do not consider that a radical operation is advisable, and the question in these is whether anything can be done in the way of prolonging the life of the patient, or of making the period of life that remains to her more comfortable. In some of these cases the patient's life can no doubt be prolonged by excision of the breast alone, or of the axillary glands as well, perhaps for three or four months or even as long as a year, and she may then die of internal disease without suffering so much as she would have done from the local tumour. She should, however, be told that the object of the operation is merely to prolong life, and many women, knowing that, would prefer not to undergo it. In some cases where there is a foul ulcer the patient may be relieved of much pain and trouble by removal of the breast. On the whole, however, I do not see any particular advantage in operating in cases of breast cancer unless with the view of curing the disease, and in cases where it is practically certain that the disease cannot be cured the performance of an operation would depend entirely upon the patient's desire for a short prolongation of life or on the possibility of relieving her of some serious trouble. As a matter of fact, we do not have here, as we have in intestinal cases, any substitute plan to offer which will either relieve the patient materially or give any marked prolongation of life. It is practically either a thorough operation or nothing, and therefore the breast is not a situation in which the so-called careful selection of cases and exclusion of all but simple cases from operation is at all permissible.

THIRTEEN CASES OF STRANGULATED OVARIAN CYSTS.

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THE frequency with which cysts may become twisted on their pedicle can be gathered from the fact that during three years I have met with thirteen cases in the women's ward at St. Bartholomew's Hospital, and this out of a total of a little over 100 operations for ovariotomy during that period. In the majority of instances the onset of the symptoms suggesting strangulation was sudden, in the others it was rather of a subacute nature. The symptoms of this accident are so suggestive and typical that there ought to be little difficulty in making an accurate diagnosis. The condition, if left unrelieved, though not necessarily fatal, is one of extreme danger, while with timely surgical aid life is almost invariably saved and the patient completely cured of her trouble. The effect of the twist varies somewhat according to its tightness and the nature of the cystic contents. If the twist be only partial the veins, owing to the comparative thinness of their walls, become obstructed, while the arteries still continue to pump blood into the tumour. The effect of this is so to increase the blood-pressure in the tumour and its capsule that the capillaries or thin-walled veins give way, and hæmorrhage takes place both within the tumour and its capsule. In this way a very considerable hæmorrhage may occur, the cysts becoming filled with blood, while a large hæmatoma may be formed in the capsular connective tissue. It would seem, however, that although the stoppage of the circulation at first takes place from compression of the veins, that stasis soon occurs and the blood clots in the supplying arteries as well as in the effluent veins. In some cases from the first the twist is so complete as at once to cut off all blood supply to the tumour. When the twist is sufficiently tight to impede or cut off the blood supply secondary changes occur with more or less rapidity. It would seem from the study of the cases recorded that it is quite possible to have a twist of the pedicle giving rise to sudden and acute symptoms, which nevertheless may relieve itself by again becoming untwisted and allowing the engorged veins to empty themselves. This is what must have occurred in Case 12. The two previous attacks to the one for which the patient was admitted must have been almost certainly due to a twist which was thus relieved before the blood had permanently clotted in the veins. Very soon after a twist has occurred, and probably coincident with total cessation of the circulation within it, nature seems to regard the cyst as a foreign body and makes every effort to surround and encase the tumour with inflammatory exudation. This exudation is of course poured out, not by the dead tumour, but by the living tissues in contact with it. Thus the parietal peritoneum, the intestines, the uterus, bladder, omentum, in fact, every tissue in contact with the tumour, becomes adherent to it by the exudation of plastic lymph. If the tumour happens to be small and its contents simple cystic fluid the cyst wall obtains sufficient nourishment from these adherent structures to maintain its vitality. On the other hand, if the cyst be large, and if its contents are already purulent, or if there be much extravasated blood within it, the efforts of the neighbouring tissues to adhere to and nourish it are ineffectual, and the whole cyst wall falls quickly into a state of gangrene, or it may more slowly soften in parts and give way, allowing the contents to be extravasated. Whether the wall simply becomes gangrenous or whether the contents are extravasated as well acute peritonitis with death is the result.

With regard to diagnosis, the fact that a cyst can become twisted points to its having a long and comparatively narrow pedicle. It must be practically free from adhesions. It cannot be beneath the broad ligament, and must be well out of the pelvis, and it is just this form of tumour which, in an early stage and whilst small, gives so little inconvenience that a patient may be quite unaware of its existence until a sudden onset of a characteristic symptom of twisting (see Case 13). In the majority of cases, however, the patient will be aware that she previously has had a tumour, though it may have caused little trouble. If the twist occur suddenly the symptoms are very characteristic. The woman being previously in comfort is suddenly seized with severe abdominal pain, sometimes sufficient to make her feel faint and generally followed by some vomiting. There is a diffuse tenderness over the whole abdomen. The patient, if she knows that she has previously had a tumour, will generally say that coincident with the attack the tumour seemed to swell up and become harder. On abdominal examination the tumour may be felt of a globular outline, but generally of not a very large size. It is tender on pressure, and has a somewhat firmer feel than the majority of ovarian cysts. It can be moved from side to side as if rocking on a long pedicle, but nevertheless it does not seem to rock independently of the parietal peritoneum to which it is often slightly adherent. Occasionally some creaking can be heard and felt due to the rubbing of inflamed peritoneal surfaces (see Cases 7 and 8). Per vaginam the uterus is probably movable and the tumour, if felt at all, is lying higher up, only resting on the brim of the pelvis. The patient's general condition is one of distress. She suffers from pain and uneasiness, constipation, and not infrequently retention of urine, the pulse is rapid, and the temperature more often raised than not, though here, as in other abdominal cases, the thermometer is an unreliable guide. It has this advantage, however, that with severe general symptoms, if the temperature is raised the prognosis is far more favourable than when the same symptoms are present with a normal or subnormal temperature. The symptoms somewhat resembling those of a twisted cyst may be due to a simple inflamed cyst, a ruptured cyst, an extra-uterine fœtation, or a hæmatocele. It is not possible to diagnose whether a cyst is inflamed from a twist or other causes, nor is it important, for in either case an operation should be undertaken. If the symptoms be due to the rupture of a cyst there will be the same sudden symptoms as if a twist had occurred, but there is often this important difference, that the outline of a twisted cyst is well defined, feels firm, and the tumour is somewhat larger than previously, while in a ruptured cyst the outline of a tumour becomes indistinct and feels flaccid, is smaller, or even disappears, whilst there is dulness in the flanks from gravitation of the extravasated contents to these regions. When the symptoms are due to a ruptured extra-uterine fœtation there will often be a history of missed, or at least irregular, periods. There may be suggestive signs about the breasts. The pain is more pronounced, while it is almost invariably accompanied by fainting and other symptoms of collapse. The anæmic condition of the tissues, soft, rapid pulse, and sighing respiration suggest bleeding, while an abdominal examination shows there is no definite tumour.

These symptoms collectively can scarcely be mistaken for a twisted cyst On the other hand, a limited hæmatocele into the broad ligament or into Douglas's pouch may closely resemble a twisted cyst. There was such a case recently in the Martha Ward at St. Bartholomew's Hospital. In this instance a tumour was supposed to have existed for some time, but acute symptoms had only been present for three weeks. A hard, firm tumour could be felt rising half-way to the umbilicus, well defined and very tender, but the uterus was fixed and the tumour extended down into Douglas's pouch. On operating the tumour was found to consist of blood clots the size of a child's head in Douglas's pouch, spreading upwards in a globular form, being roofed in by inherent omentum and intestines. In such a case the tumour in Douglas's pouch and the fixing of the uterus should have suggested the nature of the case. If a twisted cyst is not diagnosed early the symptoms may rapidly pass on into those of acute peritonitis, and owing to the distension of the intestines disguising the cyst the diagnosis is obscure.

As to treatment, this, fortunately, is very simple, for directly the nature of the case is suspected the abdomen should be opened and the cyst removed. The fact that the tumour has become twisted shows that it has a long pedicle, that it is well out of the pelvis, and can have but slight adhesions, conditions which make the removal of any ovarian cyst particularly favourable. What the surgeon is anxious about is that the operation should be undertaken before the occurrence of acute peritonitis. Should this have occurred it is difficult to save the patient. In such a case, if not actually moribund, the abdomen, after removal of the tumour, should be thoroughly flushed and subsequently drained. Death occurred in only one of the cases recorded. In this instance the delay had been too long, the cyst had burst, and at the time of the operation there was acute general peritonitis. The majority of the cases were admitted under the care of my colleagues, Dr. Champneys and Dr. Griffith, and were transferred to me for operation.

CASE 1.—A woman aged forty-four years who was admitted to hospital in August, 1892. For seven years she had noticed a swelling in the abdomen, which during the last few months had got considerably larger, but it did not give her much pain or inconvenience. On Aug. 18th, whilst washing, she was suddenly seized with acute pain in the abdomen which made her feel faint. From that time till she was admitted, four days later, she had been ill with considerable pain and for the last two days there had been some vomiting. On admission she was found to be much collapsed, with a scarcely perceptible pulse at the wrist. The abdomen was opened and a large multilocular cyst found with slight recent adhesions all over the surface to the parietes. Here and there some yellow lymph on the surface was found, and also in one or two places on the intestines. The tumour was removed and the abdominal cavity washed, but the patient practically never came out from the shock from which she was suffering prior to the operation and died a few hours later. The cyst was twisted one and a half times on its axis.

CASE 2.—A woman aged twenty-four years who was admitted to hospital in February, 1893. She had noticed a lump in her abdomen for three or four months, but it had given her very little pain, and she had seen her last period a week ago, since which time she had had great pain and she thought the tumour had got somewhat larger. On admission there was a tumour extending as high as the costal cartilages on either side, feeling very tight, with considerable tenderness on pressure. The patient's temperature was somewhat raised and she had a pulse of 120 but of fair volume. On opening the abdomen the tumour proved to be a large multilocular cyst with one complete twist in its pedicle. It was adherent by recent adhesions to the parietes and omentum. After removal it was found that there had been considerable hæmorrhage into the cyst and some small hæmorrhagic nodules in the cyst wall. The abdominal cavity was flushed and the drainage tube left in for a few days. The patient recovered.

CASE 3.—A woman aged forty-one years, who was admitted to hospital in March, 1893. She had been in the hospital four years previously suffering from an abdominal tumour which then caused some difficulty in micturition. Since that time, although the tumour had increased somewhat in size, it had given her no pain, and she was able to do her work. A week previously abdominal pain suddenly came on and was followed by constipation. She had no vomiting and the pain was of a spasmodic character; the abdomen was extremely tender. On examination a fluctuating swelling could be felt—dull on superficial percussion, resonant on deep percussion—occupying the lower half of the abdomen. She could scarcely bear pressure, all the parts being exquisitely tender. The temperature was not raised, but the pulse was quick. On opening the abdomen a broad ligament cyst on the right side was found with one and a half complete twists at its pedicle. It contained blood-stained fluid, and there were some clots situated between the cyst wall and the peritoneum. The patient recovered.

CASE 4.—A woman aged twenty-five years, who was admitted to hospital in February, 1894. She had noticed a tumour for nearly a year and a half; at one time it got very much smaller, but it increased again six months ago. She thought it had increased considerably during the last two months, and for five weeks she had had a considerable amount of pain. On examination a large egg-shaped, very tender tumour could be felt, extending as low as Poupart's ligament on each side and up to the costal arches. On opening the abdomen the tumour was found to contain a dirty red-coloured fluid, about ten pints of which was drawn off, consisting largely of blood. The tumour was found to have a complete turn from left to right at its pedicle. There were also some old hæmorrhages in the sac of the cyst. The patient was seriously ill for some days after the operation with a good deal of vomiting and hiccough, but ultimately made a good recovery.

CASE 5.—A woman aged forty-one years, who was admitted to hospital in February, 1894. She had noticed the tumour for about a year, but it did not give her much trouble till four days previously, when whilst at work she was attacked by severe pain described as "labour pains." These pains continued more or less ever since, and she had a good deal of vomiting, and said the tumour felt much harder and a little larger than it was before the attack. On examination in the right half of the abdomen, extending about two inches above the umbilicus, was a firm, elastic tumour, very tender on pressure and giving the idea of tightly compressed fluid. Per vaginam the tumour could not be felt. On opening the abdomen a considerable quantity of blood-stained fluid escaped from the peritoneal cavity. A large cyst, dark-coloured on the surface, then came into view. It was found that it had one complete twist at the pedicle. There was no adhesion anteriorly, but on raising the tumour the sigmoid flexure of the colon was found to be somewhat firmly fixed to it on the left side by old adhesions, which took some trouble to separate. No flushing or drainage was employed. The patient recovered.

CASE 6.—A woman aged forty-four years, who was admitted to hospital in March, 1894. She stated that she had noticed her abdomen getting larger for the last year and a half, but it gave her no trouble till a month previously, when for the first time she had pain. The pain had continued more or less severe since, and during this time she had many attacks of retention of urine. The abdomen was much distended by an elastic and very tender tumour rising to the costal arches. Per vaginam the tumour could just be felt lying on the brim of the pelvis. On opening the abdomen a multilocular cyst of the left ovary was found. It was slightly dark in colour on the surface and had little more than a complete twist at the pedicle. The main cyst contained a dark-coloured fluid of the consistency of glycerine. Many of the secondary cysts, however, seemed to be distended by a simple blood-clot. There were a few recent adhesions to the parietal peritoneum. Owing to a considerable amount of the fluid escaping into the peritoneal cavity it was well flushed with water, but no drainage was used. The patient recovered.

CASE 7.—A woman aged twenty-two years, who was admitted to hospital in March, 1894. She had noticed her abdomen getting large for a twelvemonth, and had had occasionally slight pain, but nothing to speak of. Two days previously she had a sudden attack of violent pain lasting four or five hours, and she vomited two or three times. The pain then got better, but continued in a modified form till her admission. On admission she had a good pulse and a temperature of 101° F. The lower abdomen was occupied by a spherical tumour arising within three inches of the ensiform cartilage. It felt densely hard, not quite globular in outline, and with one big projection on its left side. A well-marked crepitus could be felt and heard over its surface when she took a deep breath. Per vaginam, the tumour could just be felt lying on the brim of the pelvis. On opening the abdomen the cyst was found to be multilocular, containing a great

deal of apparently solid growth which, however, afterwards turned out to be chiefly blood-clot. It could not be reduced by tapping, so the incision was enlarged to eight inches, the whole tumour being turned out. It was found to have one complete twist at the pedicle. No flushing or drainage were employed. The patient recovered. A year later I had the following interesting letter kindly written to me by Dr. W. E. Porter. He said: "The girl aged twenty-two years, upon whom you operated in March, 1894, was delivered of a fine, healthy child on March 15th, 1895, that is, just a year after the operation, and she made a very good recovery. I was anxious about her because eighteen months ago I attended a lady who had been operated upon ten years previously for ovariotomy, and who some three months before her full term of pregnancy was finished died suddenly of internal hæmorrhage, the result, probably, of the tearing of some of the old adhesions."

CASE 8.—A woman aged fifty-eight years, who was admitted to hospital at the end of March, 1894. For the last six or eight months she had noticed a hard lump in the right iliac fossa, but it had never given her much trouble. Three weeks ago, however, she had very severe pain in the neighbourhood of the tumour and noticed that the tumour seemed to have increased slightly in size and had become very hard. On admission, the temperature was not raised, and she had a good pulse. On examining the abdomen a tumour extending to the costal arches and feeling very firm was found. It was very irregular on the surface and well-marked crepitus could be heard and felt over portions of the tumour. Per vaginam a part of the tumour could be felt lying behind the uterus. The abdomen was opened by a four-inch incision, and a moderate amount of blood-stained fluid escaped from the peritoneal cavity. On the surface of the tumour was a small quantity of lymph in places. The tumour was composed of many small cysts. A trocar was put in, but practically no fluid came out. The incision was then prolonged and the tumour removed entire. It was found on section that most of the secondary cysts contained blood. The abdominal cavity was flushed but not drained. The patient recovered.

CASE 9.—A woman aged thirty-eight years, who was admitted to hospital in July, 1894. She had noticed herself getting larger for nearly two years, but much more rapidly during the last three months. She was a healthy-looking woman, and had not complained of much pain. On examination the abdomen was found to be distended by an irregular tumour, extending to midway between the ensiform cartilage and the umbilicus. The consistency varied in different parts, some being elastic and apparently fluctuating, while others were quite firm and hard. Per vaginam the sound passed two inches and a half and the uterus was fairly movable; the tumour could be felt lying on the brim of the pelvis. On opening the abdomen the tumour proved to be a multilocular ovarian cyst in some portion of which were hard nodules. It was slightly œdematous, but there was no hæmorrhage into it or into its capsule; it was twisted half a turn to the left. The tumour consisted of the right ovary. There were no adhesions. No irrigation or drainage was employed. The patient recovered.

CASE 10.—A woman aged twenty-five years, who was admitted to hospital in August, 1894. About a year ago she first noticed sharp pain in the groin. On admission the patient did not feel ill, but there was much tenderness over the abdomen. Examination showed a tumour extending half way between the pubes and the umbilicus; it was slightly movable and gave an elastic sensation. Per vaginam the tumour could be felt high up in the utero-vesical pouch; the sound passed three and a half inches. On opening the abdomen the tumour proved to be a dermoid cyst of the left ovary. There were no adhesions. It was found to have had one and a half complete turns of the pedicle. On examining it after removal it contained large quantities of sebaceous material, hair, teeth, and bones, but no blood. No irrigation or drainage was employed. The patient recovered.

CASE 11.—A woman aged thirty-one years, who was admitted to hospital in August, 1894. She noticed after her last confinement, thirteen months previously, that the abdomen did not seem to regain its natural size, and during the last two or three months had been getting considerably larger, but she had had no pain and no trouble with the urine, though she had been getting thinner. On admission the abdomen was found uniformly distended by a tumour extending to within two fingers' breadth of the costal arches on either side. Some portions of the tumour felt hard and others comparatively soft, but owing to a good deal of fat in the abdominal walls it was not easy to determine the exact consistency. Per vaginam, the os was found dilated, and would admit the finger. The uterus was freely movable. No part of the tumour could be found in the pelvis. The sound passed two inches and a half. The tumour proved to be a multilocular cyst of the left ovary. Its contents were very thick and would not run through the trocar. A certain amount of the contents were extravasated into the abdominal cavity during the removal of the tumour. There was half a twist of the pedicle. The abdomen was well irrigated to wash out the material that had escaped during the extraction of the cyst. No drainage was used. The patient recovered. An interesting point about this case was the loss of one of the sponges. On counting the sponges after the operation it was found that one of them, a thin flat sponge five inches in diameter, was missing. A thorough search in every direction was made for it without result. It could not be found in the abdominal cavity. The nurse then stated that during the operation she observed at one time that the water did not run very freely away from the basin where she was washing the sponges. The opening at the bottom of the basin was only three-fourths of an inch in diameter, and it did not look as if it was possible for a sponge to pass through. However, the plumber was sent for, and, the force pump being used, the sponge was expelled into the trap at the base of the building. It was almost impossible to conceive that this large sponge could pass through so small an opening. Indeed, as we endeavoured to force it down subsequently it was quite impossible to get it through, but when smeared with some of the mucus of the tumour it was possible to pass it through the hole at the bottom of the basin with comparative ease. Since this accident a fine wire grating is put down the hole in the bottom of the basin and I never allow any water to be thrown away except through this, so that it is absolutely impossible that such an accident should occur again.

CASE 12.—A woman aged thirty-three years who was admitted to hospital in October, 1894. Three weeks after her last confinement, thirteen months previously, she was suddenly seized with severe abdominal pain, but in a couple of days she was all right again. Since that time she has had four or five similar attacks, lasting from a few hours till a couple of days. She had also noticed during the whole of this time a swelling in her abdomen. She was very clear that at the time of these attacks the swelling appeared to get larger and was very tender. She came to the hospital during one of these attacks suffering intense pain, and was at once admitted to the Martha Ward. On examining the abdomen the tumour was found to be about two inches above the umbilicus. It was slightly displaceable from side to side and rather tender upon pressure. Per vaginam high up a rounded swelling could be felt in front of the uterus. Bimanually a tumour could be felt which apparently was about the size of a six months pregnancy. On opening the abdomen a tense, dark-bluish, grey tumour presented which was brought out entire after enlarging the wound. The pedicle and tumour were free from adhesions. It was found twisted one and a half times in the same direction as a corkscrew. Some fluid from a cyst in it had ruptured and escaped into the peritoneal cavity, which was thoroughly washed out with sterilised water. The wound was entirely closed without drainage. The tumour proved to be a multilocular cyst of the right ovary which was twisted on its pedicle. It contained a large quantity of dark, chocolate-coloured blood. There were several secondary cysts all containing blood-clot or fluid blood. The patient recovered.

CASE 13.—This patient was a woman aged thirty-eight years who was admitted to hospital in April, 1895. She had eleven children, the youngest born fifteen months previously, which she was still suckling. She said she had never got to her proper size since her last confinement. Six months ago she had some pain in the left groin, and had loss of flesh and felt ill since. Fourteen days before admission she was suddenly seized with severe pain in the left side, and for the first time she then noticed a lump in this position. On admission there was a fluctuating tumour rather firm extending midway to the ensiform cartilage. It was altogether above the pelvis. Per vaginam the cervix was very soft and the vagina mauve in colour, and an impulse was easily conveyed from the tumour to the cervix, and there was some doubt as to whether the patient might not be pregnant. The evening before the operation the abdomen was noticed to have lost a good deal of its distension, the tumour being much more ill-defined than it was at

first. An incision was made in the middle line from the umbilicus downwards for three inches, which was subsequently enlarged a couple of inches downwards. On opening the peritoneal cavity a considerable quantity of muco-purulent fluid escaped. This was found to be the contents of a ruptured cyst. The whole tumour, which was growing from the left ovary, was brought forward and was found to be twisted one complete turn at its pedicle. The main mass was pulled out of the abdominal cavity, the rent in the cyst enlarged, and the cavity emptied, the secondary cysts also being emptied from the same opening. The pedicle was, then transfixed in the usual way. The abdominal cavity was very thoroughly washed out with sterilised water. There was no drainage. The patient recovered.

A RECORD OF THE COMMON SORE-THROATS OCCURRING AMONGST 400 ADOLESCENTS DURING A PERIOD OF TWENTY-FIVE YEARS.

BY CLEMENT DUKES, M.D., B.S. LOND.,
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IT seems to me to be the duty of those members of the profession who occupy positions where exceptional opportunities occur to recount their facts from time to time. With this feeling in view I place on record these few observations. It is necessary to explain a little in detail the system of work in force so as to ensure the value of the facts. During the whole of the twenty-five years I have been physician to the Rugby School I have visited with the utmost regularity every boarding-house where the members of the school reside, starting at exactly the same time (8.15 A.M.) every week-day during every term, and on Sundays at 8.45 A.M. The members of the school are housed in nine boarding-houses, and the numbers, varying from year to year, give an average of just over 400; at the present moment they are 500. In consequence of this regularity and by the use of a little moral persuasion, both with regard to each house-matron and the boys themselves, I am usually able to see the beginnings of all illnesses; in fact, I doubt whether anyone, except where the same system is in force, has ever had such a unique opportunity, amongst such a number, and extending over so many years. I am continually instilling into the matrons and the boys the importance of my seeing invalids in the very earliest stage of not feeling well, hours before one can definitely diagnose the ailment which is causing the discomfort. In this way I am able not only to learn the symptoms of the onset of disease, but, a circumstance of still greater moment to the individual patient, to place him early under the most favourable conditions as regards himself, and to isolate him if need be for the protection of school-fellows. In my very early days of office here I recognised the importance of knowing the condition of the throat in the young, it being involved in so many illnesses; consequently the habit arose intuitively of looking at the throat of every boy who expressed himself as not feeling well, without waiting for any complaint from him concerning it. And whenever I noticed the least deviation from a healthy appearance, however trivial, recognising the fact that everything has a beginning, strict isolation was enforced, and he was kept away from the healthy until quite recovered. In this way all ailments attended with sore-throat, some of them of the greatest moment to the young, have been prevented from spreading. I scarcely need to point out that it is the first cases that one requires to be always on the look out for and to isolate if the diseases are to be limited in extent, as I think I shall prove that they can be. On inspecting the throat in the young in the very earliest stage of its abnormality certain common conditions are discovered which gradually assume the various forms typical of recognised diseases. And I see these throats and isolate them often long before a diagnosis is possible. When asked, as I frequently am, what is the matter with the throat I am only able to plead ignorance; but I strive to impress the fact upon my inquisitors that when I am able to diagnose the case at first sight I have secured it far too late for the welfare of the individual and for the protection of other members of the school.

1. *Inflammatory sore-throats.*—The first stage of all the common sore-throats, which are termed "tonsillitis," is that the membrane of the fauces generally appears smooth, dry, glistening, and as if all secretion and the superficial layer of the mucous membrane had been scraped off and the surface polished. Many throats under treatment proceed no further than this stage. In the next condition this superficial layer of the mucous membrane is swollen, which causes it to assume a dusky-red velvet appearance, and this also may proceed no further. This is succeeded in a large proportion of cases by swelling of the tonsils, which gradually become covered with minute isolated white dots, and which are occasioned by an excess of the normal secretion, owing to the inflammation, from the follicles of the tonsils. This secretion in certain cases, and these individuals usually have this kind of throat whenever they take cold, becomes so excessive as not only to appear at the orifices of the follicles, but the white spots join one another until the surface of the tonsil becomes covered with a thick, soft, ashy grey, dirty-looking membrane, but which bears no more relation to diphtheria than chicken-pox does to small-pox. The same individual invariably has the same kind of inflammatory throat, and whenever he takes cold it is in the form of, or accompanied by, a sore-throat. Some of these boys have a sore-throat at least once a term, and as some remain at school several years the same individual is accounted for many times over in my list of cases. In the last phase of these cases of tonsillitis the inflammation and swelling—often after a prior subsidence, so as to seem almost like a recrudescence—increase, extend, and involve the soft palate, and a quinsy is formed. I regard all these forms of tonsillitis as infectious in the young, and they spread in the same way, but not to the same extent, as common colds.

2. *Septic sore-throats.*—As our water-supply, house drainage, and town drainage are good, the septic sore-throats which arise from defects in these arrangements do not come under my notice in relation with the school. I may mention that I am very importunate over the question of flushing drains and emptying drinking-water cisterns and filters before the reassembling of the school after each vacation. As further evidence of the sanitary state of the school premises, I would lay stress upon the fact that during twenty-five years there have only been four cases of typhoid fever in the school, three of which I traced to their origin. One occurred in 1871, its origin was untraced; another appeared in 1877, from a recognised defective drain which was not remedied as soon as it should have been; another occurred in 1887, through an enthusiastic naturalist being allowed by his parent as a great treat to have a day in Cambridgeshire prior to his return to school to catch swallow-tail butterflies, and, being very tired and parched with thirst, he lay on his stomach and drank from a ditch, having only just time to catch his train; the last, which occurred in 1889 from eating oysters, was, unfortunately, fatal.

3. *The sore-throat of scarlet fever* in its initial stage consists of a diffuse, dull, brick-red appearance of the mucous membrane of the fauces—in fact, it is a diffuse rash on the mucous membrane similar to that which occurs subsequently on the skin. It commences at, or at all events is most visible on, the wings of the soft palate extending to the tip of the uvula, but it involves the whole of the mucous membrane of the fauces. In a large proportion of cases it begins and ends in this, though in many it progresses to every phase of ulceration, which alone is sometimes difficult to assign to scarlet fever; but the character of the rash, together with the peeling tongue on the fourth day, leave little doubt as to the diagnosis. It is the slight sore-throat accompanied by merely a transient rash which causes the main difficulty in diagnosis.

4. *The sore-throat of diphtheria.*—At the onset there is usually a dark redness and swelling of the tonsils and the fauces generally, with very marked œdema of the uvula, which appearances are quite undistinguishable from acute tonsillitis. Hence the necessity of at once isolating all cases of tonsillitis, as no one can possibly be sure what form of sore throat it will prove to be. Subsequently the whole, or part, of the fauces becomes covered with a greyish secretion, sometimes assuming the character of a dense membrane like wet wash leather, which arises in patches, and rarely in the small white regular dots which coalesce into a patch incidental to tonsillitis. These patches spread and may become continuous involving the whole of the fauces.

5. *The sore-throat of varicella* is occasioned by spots on the mouth and pharynx similar to those on the skin, and they

often greatly resemble the small ulcers common to stomatitis, from which they are distinguishable by the eruption on the skin.

6. *The sore-throat of epidemic roseola* (rötheln) resembles closely the early stage of the throat of scarlet fever, but it is accompanied by very early enlargement of the posterior cervical and other glands. There is no peeling of the tongue on the fourth day.

Table 1, showing the Numbers of the Common Sore-throats occurring amongst 400 Adolescents during Twenty-five Years.

Years.	Inflammatory.	Scarlet fever.	Diphtheria.
1871...	4	—	—
1872...	11	1	—
1873...	1	—	—
1874...	9	10	—
1875...	5	2	—
1876...	4	—	—
1877...	14	6	—
1878...	2	—	—
1879...	5	—	—
1880...	32	6	—
1881...	7	17	—
1882...	20	—	—
1883...	34	—	2
1884...	22	5	1
1885...	42	3	—
1886...	27	1	—
1887...	51	1	—
1888...	17	—	—
1889...	10	7	—
1890...	28	—	—
1891...	11	—	—
1892...	29	—	—
1893	33	—	—
1894...	14	2	—
1895...	18	10	—
	450	71	3

Table 2, showing the Common Sore-throats occurring amongst 400 Adolescents from Jan. 1st, 1871, to Dec. 31st, 1895.

Sore-throats.	Total numbers.	Average number of cases per annum.	Per cent. per annum.
Inflammatory	450	18·00	4·50
Scarlet Fever	71	2·84	0·71
Diphtheria	3	0·12	0·03

Rugby.

CASE OF

FUNCTIONAL APHONIA IN MAN; TREATMENT, &c.; WITH SPECIAL REFERENCE TO SO-CALLED VARICOSE VEINS AT THE BASE OF THE TONGUE.

BY HERBERT TILLEY, M.D., B.S. LOND.,
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THE following case which has recently come under my notice is interesting from a clinical point of view as illustrating a condition as uncommon in the male sex as it is common in the female. The comparative rarity of the affection in man accounts, I think, for its real nature being at first overlooked in this case and also its suggested etiology and the treatment advised for its relief. It was said to be due to varicose veins at the base of the tongue, the appropriate treatment being cauterisation by means of the galvano-cautery, a pathology and treatment which, I believe, emanate from an institution in London where diseases of the ear, nose, and throat receive special attention, and, moreover, a condition which is supposed by those who believe in its frequency to be at the root of many laryngeal and pharyngeal symptoms. This case with the two others cited below are only samples of many others with which I have had to deal, and will perhaps best furnish my reason for doubting the existence of such a condition as I have referred to.

CASE 1.—A man aged thirty-three years, married, was brought to me by his medical attendant on Nov. 30th, 1895, complaining of hoarseness, which came on in June, 1894, and had lasted ever since. He had conducted a Sunday morning service in his church and felt his throat considerably fatigued at the close of it; the same afternoon he addressed a school, when his voice left him completely and his conversation was afterwards carried on in a whisper. He never had any pain, but after speaking for some time he experienced a kind of irritation in the larynx. Some four months after the onset of hoarseness he consulted a specialist, and was told he had varicose veins at the base of the tongue, which produced congestion of the vocal cords. The base of his tongue was cauterised (cocaine being first applied), but without any relief. He was then advised to have his turbinate bones removed, which he declined, and he returned to his early home in Brussels, where he consulted an expert in laryngeal diseases, who told him it was a form of throat paralysis which would get better and prescribed a tonic. On Nov. 30th, 1895, I saw the patient, a tall, anæmic man, who detailed his history with a feeble voice, smiling nervously all the time. The tongue, lips, and teeth seemed more especially the speech-producing organs, effecting a hoarseness which I think characterises these functional cases, compared with those where organic disease of the larynx produces the aphonia. On laryngoscopic examination attempted phonation failed to bring the vocal cords to the middle line, an elliptical space being left between them. They were not congested. There were no enlarged veins at the base of the tongue or any excess of lymphoid tissue. The nasal cavities were perfectly free and he had always breathed freely through his nose. Treatment was as follows. By means of a faradic battery and Mackenzie's intra-laryngeal electrode I passed a strong spark from the secondary coil through the larynx, when the voice immediately came back. He then laughed uncontrollably for at least ten minutes. I prescribed a pill of strychnia and valerian, and on Jan. 20th, 1896, he wrote to say that his voice, though occasionally weak, had never left him, and "last Sunday I addressed the school with the greatest ease." As regards the treatment of this case it may be said the cautery to the base of the tongue was merely used to produce a shock; but I do not think this was the case because he was told it would be painless, and cocaine was applied to make it so.

CASE 2.—A man aged thirty-eight years consulted a specialist for hoarseness of three weeks' duration. He was told he had varicose veins at the base of the tongue which needed the cautery, and that the condition caused the hoarseness. He declined to have anything done, and I saw him four days afterwards, when the veins had evidently temporarily disappeared, but there was a great deal of laryngeal and pharyngeal congestion. I advised him to take a further opinion of an eminent expert, who also failed to find any varicose veins. The patient being of gouty habit and a free liver I ordered him horse exercise and a rigid diet, and in a fortnight all his throat symptoms had disappeared.

CASE 3.—This patient was a schoolmaster aged forty-one years, who consulted me last summer for throat fatigue after using his voice for a short time. After teaching for about an hour his voice practically left him and was too painful to use. On examination the pharynx was much congested with enlarged lateral pharyngeal bands (pharyngitis lateralis hypertrophica). The base of the tongue was perfectly normal; only a few small veins were to be seen. He had a deflection of the nasal septum to the right side. His parents had had gout and he had a small tophus in the right pinna. I advised constitutional treatment—outdoor exercise &c.—and advised him to have some lessons in voice production, as his method of voice-using was eminently faulty. He sought further advice, consulting a laryngologist, who suggested varicose veins. The cautery treatment was adopted, which was followed by acute inflammation around

the base of the tongue and nearly a fortnight in bed. He returned to me five weeks later and significantly said, "By the way, do you really think I had any varicose veins in my tongue? I think I'm worse than I was before."

From other quarters I hear the same story, proving that my experience of these cases is not unique, and one is led to ask, "Does such a condition exist, and, if so, with what frequency?" For some four years at special institutions for the treatment of diseases of the throat, ear, and nose I have been looking for a genuine case of varicose veins in the base of the tongue. I have seen congestion and fulness of the veins, and considering the amount of lymphoid tissue present in this situation, its occasional hypertrophy producing marked enlargement (lingual tonsils) and even tumours of such size as to imperil life, as in the case shown last year at the Laryngological Society by Dr. Baber—considering these facts one would expect to find a condition of venous engorgement sometimes, but even this I venture to say is not common. Again, would one expect to find a true varicose condition in such a situation, where the venous blood pressure must be so slight, and, if so, what causes it?

Welbeck-street, W.

TWO CASES OF CHROMIDROSIS.

BY F. W. A. STOTT, M.A., M.B. OXON.

A FEW months ago I was called upon to see the following interesting case.

The patient was a man about forty years of age who had noticed about three weeks previously that his underlinen always became stained with a pink colour after a few hours' wear and that the colouring was more extensive and deeper after he had been perspiring freely. He had also noticed that his pillow was similarly coloured on rising in the morning. He took frequent hot baths with a view of removing the colour from his skin, but without the desired effect. This went on for about a week, when his son, a young man engaged at the same place of business as his father, commenced to exhibit the same symptom. As they were wearing no coloured material and could not account for the phenomenon they naturally became alarmed and sought medical advice. The elder patient (I did not see the younger) showed me his collar, cuffs, and shirt, which were all stained with a beautiful pink (not the colour of blood). The stain was most marked upon the collar and neck-band and upon those parts of the shirt which would naturally come into contact with the nates and scrotum, but, singularly enough, and I take it as a significant fact, the perspiration of the axillæ and of those parts of the body which were covered by an undervest of unbleached wool showed no colour, only those parts being affected which would most frequently come into contact with unwashed hands. I was told that the colour could not be washed out with soap and water. I asked for some of the stained articles with the view of trying to extract the colouring matter and of making a spectroscopic examination, but this was either forgotten or disregarded, and a rare opportunity of making an interesting observation was lost. I closely examined the skin, but could find no traces of colouring matter upon it, and, so far as the eye could see, it was in a perfectly normal condition. I took some sterilised tubes and made three inoculations upon potato media—namely, (1) from the back of the neck; (2) from the scrotum; and (3) from the upper arm where there was no stain. In four days I was delighted to find that one of my inoculations (the one from the scrotum) had been successful and that I had obtained a coloured growth. It presented the appearance of a bead of pink coral, not very deep in shade but rather pale. As this was an impure growth, some other moulds being present, I made a second inoculation from the pink portion upon potato, and succeeded in obtaining a pure cultivation of a pink torula. From my observations of the growth of these cultures I found that they seemed to grow best at a temperature of about 65° F., the intensity of the colour varying inversely with the temperature—i.e., the higher the temperature the paler the colour, and *vice versâ*. At 32° the colour became a deep red. They required a considerable amount of moisture.

I sent the original tube to Professor Sheridan Delépine of Owens College, Manchester, who succeeded in obtaining from it the red organism which I had described to him, and who kindly sent me one of his cultivations which exactly resembled mine except that they were rather paler in colour. He also sent me a specimen mounted for the microscope. He has described a case of "black sweating" in which the organism was also a torula. Professor Dreschfeld says he has seen several cases of red sweating, but they are very rare; in the majority of his cases the skin of the back of the neck and between the shoulders was most affected. In the first instance, before making cultivations, I thought that I had to do with the bacillus prodigiosus, never having heard or read of these symptoms being produced by a red torula, and up to the present time I have been unable to obtain evidence of anyone describing a red torula as a cause of red sweating. I should be glad of further information from anyone who has observed any of these cases and of literature bearing upon the subject. I believe from the above two cases that it is a disease of the sweat glands and ducts, that it is parasitic and infective. The organism requires a soil peculiarly suited to its growth—for instance, the wife and other members of the family, with the exception of the youth, were quite unaffected. Whatever this condition of the skin is which is favourable to the growth of these organisms it must be extremely rare. I am inclined to think that the organisms are conveyed to the parts affected by the hands, but from what source I am unable to say. In these cases one cannot help looking to the occupation of the patient for a suggestion as to the possible source of infection. Is it conceivable that in the case of these two patients the handling of coins or of paper money (which occurred in the course of their business) had anything to do with the infection?

Since writing the above notes I have heard that the younger of the patients had another attack, some months after the first, but not quite so marked. The disease causes no more inconvenience than the staining of the linen by the sweat from the parts affected.

Blackpool.

CRITICAL REMARKS UPON THE NAUHEIM TREATMENT OF HEART DISEASE.

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AT the present juncture, when this method of treating diseases of the heart bids fair to be extensively practised, it may not be out of place to say a few words of very serious warning to those who are disposed to accept it at the valuation of its introducers. I think that we are wasting our time in discussing the manner in which the Nauheim baths and movements produce their remedial effects when we have nothing beyond the bare assertion of those who are working the system that such effects are really produced at all. We may, I think, employ our time more profitably in examining carefully and critically some of the statements which are made in connexion with the treatment.

It is claimed that it reduces the area of cardiac dulness, and the published writings on the subject are illustrated with diagrams purporting to be absolute reproductions to scale of the different positions assumed by the upper edge of this dulness from day to day under the treatment. On examining such a diagram we observe that the successive positions given for the edge of cardiac dulness are frequently distant from each other only a fraction of an inch. Our first feeling is one of admiration for the skill of the percussor; our next is one of absolute scepticism; and the more expert we may be ourselves the more incredulous shall we be. I am sure that my readers will agree with me that whilst it is quite possible to make out approximately the extent of relative dulness of the heart, with a variable error of, say, half an inch, anything much more accurate is impracticable; for we are not considering the superficial dulness of the heart—the dulness of the small part uncovered by lung—but the recognition of the first alteration of pitch of the note obtained by forcible percussion, when the edge of the heart interferes with the length of the vibrations through the thorax. The estimation of this precise point depending on the personal equation of the operator, the amount of pressure exerted on the chest wall by the pleximeter finger, and upon the force of the blow, hardly any two men will get the same

result on the same chest; and the same man will make out the position of the edge of relative dulness at a different place on successive examinations. This is no mere assertion of mine. I have tested it again and again, and anyone can prove it for himself. All he has to do is to blindfold himself and make out upon a given case the upper limit of relative cardiac dulness, marking it upon the surface of the chest with an aniline pencil. Let him do this several times in succession at intervals of a few minutes marking it each time. When he removes the bandage from his eyes he will find that the result is a series of lines at short distances from each other upon the chest, some of them intersecting the others, and exactly resembling one of the aforesaid diagrams of the supposed recession of the line of cardiac dulness under the Schott treatment. But I have been informed that the lines in question on the diagrams have been obtained by "auscultatory percussion." This method of examination is carried out as follows. The mouth-piece of a binaural stethoscope having been applied to the surface of the chest just below the clavicle a succession of taps are made upon the skin with the end of a small rod or other convenient object. As these taps recede from the stethoscope a point is reached where a certain alteration of pitch is noticed in the note which is heard through the stethoscope. This is claimed to correspond with the edge of the heart. I have made a number of careful experiments with this method of examination and assert that it is absolutely fallacious, as I have ascertained that the alteration in pitch in question always occurs at the same distance from the place where the stethoscope is in contact with the chest wall, wherever that may be. This distance apparently varies in different chests. Moreover, if you place the stethoscope on the centre of the right side of the chest and tap radially from it in all directions, you will find that an alteration in pitch of the note obtained will take place at about an equal distance from it all round it. This is a veritable *reductio ad absurdum*. I have not yet been able to make out the cause of this alteration in pitch, but it is certainly proved by this experiment that it does not depend upon the presence of any solid body within the thorax.

I would here remark that I do not wish for a moment to impugn the *bona fides* of the makers of these diagrams, but I venture to hazard the humble opinion that they have been unconsciously deceiving themselves. The slightest variation in the position of the stethoscope in successive examinations would cause the line of apparent dulness to vary correspondingly. Diagrams like those given in the books would thus be produced in all good faith. But, leaving the question of the possibility of estimating the absolute area of the cardiac dulness to a fraction of an inch for future consideration, does the Nauheim treatment really reduce the size of the heart as shown less accurately by the position of the apex beat? As a contribution to the elucidation of this important question I will give a brief account of four cases, admitted into the National Hospital for Diseases of the Heart and Paralysis, Soho-square, in which I have tried the effects of baths. I shall not give a complete history of each, but confine myself to the points bearing on the subject.

CASE 1.—A man aged forty-five years was admitted on June 6th, 1895. There was a strong family history of phthisis, and the patient showed signs of commencing consolidation at the left apex. He was very anæmic and his heart was dilated. The heart's apex-beat was in the left mid-clavicular line, the left limit of relative cardiac dulness was midway between the left mid-clavicular and anterior axilliary lines, and there was distinct epigastric pulsation. On June 24th he had his first bath, consisting of fifteen gallons of water at 95° F. containing 2 lb. of common salt and 2½ oz. of chloride of calcium, in which he remained for five minutes. The pulse-rate before the bath was 104 and after the bath it was 106. The extent of dulness and position of the heart's apex beat were unchanged. The second bath was given on June 25th, when the pulse before the bath was 66, fifteen minutes after it was 104, and two hours later was 112. On June 26th he had a third bath, the pulse before being 100, and directly after 104. On June 27th the fourth bath was given; before the bath the pulse was 108 and afterwards 104. On June 28th he had a fifth bath, the pulse being 100 both before and after. The position of the apex-beat and the apparent area of cardiac dulness were not altered in any way by the baths. The baths were discontinued after July 7th at the patient's request, as they evidently had no effect except to slightly accelerate the pulse-rate and make the patient feel ill.

CASE 2.—A woman aged thirty-three years was admitted on June 18th, 1895. She was the subject of mitral regurgitation and obstruction following rheumatic fever. Compensation had been failing during the last three years, during which time she had had on several occasions dropsy and slight jaundice. The position of the heart's apex-beat was 1 cm. inside the left anterior axillary line. The left limit of cardiac dulness was in the anterior axillary line and the right at the right parasternal line. She was ordered daily baths similar to those taken by the last case, and to remain in them for five minutes. The first bath was taken on June 19th; the pulse after it was the same rate as before, but apparently a trifle stronger. During the bath on June 20th the pulse became weak and irregular, and after the bath it was decidedly weaker than before, but it was beating at the same rate. The baths were discontinued after July 8th, as they evidently made her general condition worse. The position of the apex-beat and the area of cardiac dulness were not altered in any way as estimated by the ordinary methods of examination.

CASE 3.—A boy aged eleven years was admitted on July 15th, 1895. He complained of dyspnœa and pain in the chest. He had suffered from acute rheumatism on several occasions since the age of three years. The heart's apex beat was 1 cm. outside the mid-clavicular line, and the left limit of cardiac dulness was in the anterior axillary line. At the apex there was a double bruit, the systolic portion of which was conducted up into the axilla. There were also systolic bruits at both the pulmonary and aortic orifices. From July 16th baths were taken five times a week similar in every respect to those given to the other cases. The result was invariably to reduce the pulse-rate from 80 to 70 or less. No other effects whatever were produced. The position of the apex-beat and the apparent area of cardiac dulness remained the same. Compensation was eventually restored by other means after the baths had been discontinued, and he left the hospital very much improved in health.

CASE 4.—A man aged twenty-one years was admitted on July 23rd, 1895, into the Floyd Ward. He had suffered from rheumatic fever three times, the first attack having occurred at the age of eight years. He had also had chorea twice. On admission he was found to have mitral regurgitation with hypertrophy and dilatation, attended by considerable failure of compensation. On Oct. 5th he was ordered to remain for ten minutes in a bath of water at 95° F., containing to the fifteen gallons 2 lb. of salt and 2½ oz. of chloride of calcium. Before taking it a careful examination of the patient was made both by myself and by my house physician, and the apex-beat was found to be 2 cm. outside the mid-clavicular line, the left limit of cardiac dulness was in the anterior axillary line, and the pulse was 65 and markedly irregular. The effect of this bath was to quicken the pulse to 72 beats a minute. The heart, although quiet when the patient was in the bath, thumped a good deal for some little time after he had left it, and he experienced a certain amount of dyspnœa which he had not felt before the bath. The position of the apex-beat and of the left edge of cardiac dulness were absolutely unchanged. On Oct. 6th he took his second bath. After he had remained in it for four minutes he felt giddy and trembled all over, and had to be taken out. He complained of a feeling of loss of power in the left leg. From this date he took six more baths of five minutes' duration each on successive days, varying each one as follows: (1) Of plain water at 100° F.; (2) of water at 100°, containing the same salts as were given in the other cases; (3) plain water at 95°; (4) water at 65°, containing salts; (5) plain water at 90°; and (6) water at 90°, containing salts. The effect of each bath was to slightly quicken the rate of the pulse, and neither their chemical composition nor the temperature at which they were given appeared to influence the result in the slightest degree. None of the baths had the least effect upon the position of the apex-beat or the line of cardiac dulness. After every bath the patient felt drowsy and unwell. He stated that his general condition was decidedly worse for the course of baths, as palpitation was now produced by a smaller amount of exertion than formerly.

In addition to these cases the baths were tried in numerous others with results which did not differ materially from those in the ones reported above. We have, at any rate for the present, discontinued the use of these baths in the practice of the hospital, as neither I nor anyone else who saw the cases could satisfy ourselves that any benefit was derived from them. Neither the amount of saline ingredients which

they contained nor the temperature at which they were given appeared to modify their action in the least.

So much for the baths. As regards the movements, my investigations have not yet reached a stage when I can venture to express a definite opinion as to their value. I would, however, submit the following propositions. 1. If the movements are capable of producing the remarkable effects which have been ascribed to them they must of necessity be as powerful for evil in unsuitable cases as they may be for good in appropriate ones. 2. This being admitted, there is more than a probability of a great deal of harm being done by them, as they are absolutely certain to be used in unsuitable cases. 3. The reason why they will be used in unsuitable cases is because this movement cure is now being taught indiscriminately in London to masseuses and nurses, who can have neither the clinical knowledge nor the trained observation which alone can render this method safe in cases where the compensation of the heart is affected. In the hard struggle which these women find to make a living it is extremely improbable that they will confine themselves to performing these movements under the direction of medical men—it is notorious that they have not done so in the case of massage; we must, then, be prepared to find masseuses applying the Nauheim movements to cases of "heart disease" on their own account.

But the reader will probably ask me how I can account for the number of cases that we hear about of "heart disease" said to have been cured by the Nauheim treatment. The answer is very simple. Many of them were probably not cases of valvular disease of the heart at all, and many that were, never required active treatment at all. We have, as far as I know, no classified list of the patients who have been treated at Nauheim. We hear of the successful cases mainly from the patient's friends, and it is as a rule only the successes that we hear of at all. It being a fact well known to every physician that the majority of those who firmly believe that they have disease of the heart really have nothing of the kind, it follows that this ratio, modified perhaps, will also obtain among the patients who flock to Nauheim. We shall thus certainly secure a certain number of patients belonging to the two following classes for whom the treatment will obviously be more or less appropriate. The first class will contain those who are suffering from functional disturbance of the heart, which is part of a general neurasthenic condition. For these the Nauheim treatment is admirably adapted, as the patient is made to go through a definite treatment which is mysteriously modified by the physician according to certain supposed indications in his particular case. Moreover, the patient confidently expects to get well, since the treatment has the reputation of having cured cases of "heart disease" The second group of individuals likely to derive benefit are those of middle age, who eat too much, take too little exercise, and suffer from palpitation of the heart and shortness of breath on exertion. They inform you that they have a "weak heart," and they are quite correct. Their hearts are undergoing muscular degeneration and are often dilated. These cases will be much benefited by any form of gentle exercise, and the movements given by Dr. Schott are perhaps as good as any others to commence with.

With regard to real valvular disease, I have reason to believe that many go to Nauheim and go through a course of treatment because they have a cardiac murmur, although compensation is perfect. Their friends persuade them to do so because they are known to have heart disease, and it is quite possible in such cases for the result of the treatment to be a grave disturbance of the hitherto adequate compensation. In fact, my first acquaintance with the treatment was through a case of this nature. On Sept. 4th, 1894, I was called in to attend a patient who had just returned from Nauheim. For many years he had been the subject of aortic regurgitation which was giving him no trouble. It was compensated as far as it could be, and he was able to do a fair amount of the ordinary duties of life. But his friends gave him no rest until he went over to Nauheim and underwent a course of the baths and resisted movements. He returned with his compensation broken down, and died in a few weeks in spite of everything which could be done.

I hope that I have said enough to lead medical men to pause before they introduce into their routine practice a method of treatment the effects of which are so little known and the indications for which so imperfectly understood.

Queen Anne-street, W.

AN UNUSUAL CASE OF WRITER'S CRAMP.

By W. S. COLMAN, M.D., M.R.C.P. LOND.,

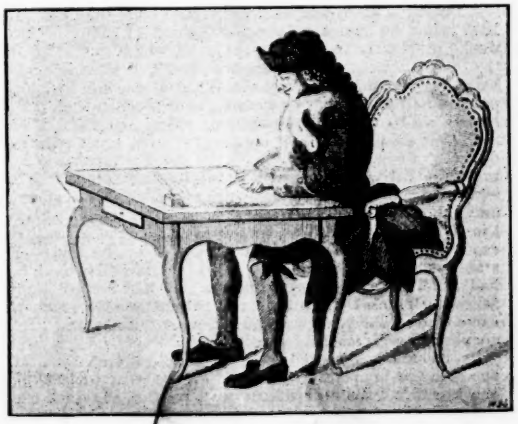
ASSISTANT PHYSICIAN TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET; ASSISTANT PHYSICIAN TO THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, ETC.

CASES of writer's cramp present many varieties. They are often classified into (1) spasmodic, (2) paralytic, or (3) tremulous. The last form is rare, and the paralytic form is not frequent. In it the patient feels more and more effort in writing, until suddenly his hand becomes limp, the pen falls from his grasp, and he is unable for some time to pick it up. The great majority of cases that apply for treatment belong to the spasmodic group. In these the spasm nearly always affects first the most peripheral parts, the fingers and thumb. This spasm may be flexor or extensor in its distribution. If the former, the pen, instead of travelling smoothly

FIG. 1.

along the paper, is too firmly pressed and tends to spurt and scatter the ink, or later the point is dug right through the paper. In the cases of extensor spasm the digits are extended and separated from one another, so that the pen falls from the hand. If the patient persists in using the hand the spasm tends to spread up the arm and even to the other hand. In some exceptional cases, however, it is not the proximal parts which suffer first, but the muscles moving the wrist. By the kindness of Dr. Beevor I have had the opportunity of observing and photographing a case of

FIG. 2.



this description. The patient was a clerk aged forty years who complained that after he had written for a short time his hand would be drawn back at the wrist so that his pen was no longer in contact with the paper. He had no spasm of the fingers and held his pen without difficulty. To prevent this elevation of the wrist he was obliged in writing to hold the hand down by pressing firmly on it with the first two fingers of the left hand, as shown in the illustration (Fig. 1), which is reproduced from a photograph. If he continued to

write the spasm became so severe that he could no longer hold the hand down with the other and he was obliged to desist from attempting to write.

From a curious photograph of an old print which recently came into my possession it is, I think, extremely probable that Voltaire suffered from a similar form of the complaint, only that in his case the flexors of the wrist rather than the extensors were affected. The print, which is here reproduced (Fig. 2), was kindly given to me by my friend Dr. Squire Sprigge, who suggested at the time that the attitude was strongly suggestive of writer's cramp. A careful examination confirms this conclusion. In the print there is seen Voltaire—whose appearance recalls Dr. Young's description of him as "witty, profligate, and thin"—writing at a table. He is holding a quill without any appearance of awkwardness in one hand, whilst his other is placed under the writing hand, for the purpose, as I believe, of resisting spasm of the flexors of the wrist and so allowing the pen to travel smoothly along the paper. It is difficult to imagine that the position was accidental, as it is certainly not one which the artist would have selected as a graceful pose. It will be noticed that the pen is held in the left hand, but this is of no significance, as in the wood-blocks of this period it was customary to draw directly on the wood without the aid of a mirror, so that the resulting prints were reversed. Attempts to trace the portrait, and to discover the circumstances under which it was taken, have unfortunately proved fruitless. None of the prints of Voltaire show him in this position, and in none of his biographies that I have been able to consult is there any allusion to inability to write. Ill-health did frequently interfere with his prolific writing, but there is no specific mention of inability to write.

SEPTIC (?) PNEUMONIA FOLLOWING SORE-THROAT (QUINSY).

BY W. WALLACE, M.D. GLASG.

I AM not aware of any connexion between the above two diseases being mentioned in the text-books. I observed, however, in THE LANCET of Dec. 14th, 1895, a paper by Dr. S. A. Tidey of Florence, in which he gives it as his opinion that septic pneumonia is a manifestation of septic tonsillitis. This induced me to offer for publication the details of the following case of pneumonia which came under my care recently.

A man aged thirty-six years was visited by me on Dec. 20th, 1895, when he gave the following account of himself. Two weeks previously he had a sore-throat, which got better, so that he could leave home on business, but after returning home his throat became worse. When I saw him he looked pale and ill and his jaws were quite locked, so that it was impossible to examine the throat. He stated that he had not been able to swallow anything without great pain and difficulty for about a fortnight. I did not again see him until the 24th, when I found that he was spitting blood-stained rusty-coloured sputum characteristic of pneumonia, and he complained of pain of a stabbing character over the lower part of the sternum. The pulse was exceedingly weak and the breathing was hurried. He stated that the quinsy had burst on the 21st and this had relieved his throat symptoms. He had a rigor on the following day. On the 25th the patient was in much the same state. The pulse was 100 and weak. He spasmodically shouted on each inspiration, or "hooted" as he described it. This, he said, was caused by the pain above referred to. On the 26th the temperature was 101° F., the pulse was 120, and the breathing was still difficult and painful, the pain being referred to the same region. He complained greatly of the foulness of the expectoration. There was some slight dulness over the apices and harsh bronchial breathing. No basic dulness was present. He had a severe rigor, and I attributed the pain to inflammation of the pleura covering a pneumonic patch adjacent to the diaphragm and causing the spasmodic cries on inspiration. I examined the sputum after it had been kept in 5 per cent. solution of carbolic acid. I prepared some dozen films and stained by Gram's method and with gentian violet. I found numerous long chains of streptococci; staphylococci and also pneumococci, single, double, and in short chains; and zoogleæ of micrococci. A son of my patient had also sore-throat and inflamed cervical glands. No membrane was expectorated in either case. For various reasons I think the case differs from simple pneumonia, and I conclude that the septic material was absorbed from the throat.

Crick, Rugby.

A Mirror OF HOSPITAL PRACTICE BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

SEAMEN'S HOSPITAL, GREENWICH.

A CASE OF HEPATIC ABSCESS WITHOUT HISTORY OR SYMPTOMS OF DYSENTERY.

(Under the care of Mr. G. R. TURNER.)

THE following case of hepatic abscess derives its chief interest from the fact that although it presented so many points in which it resembled the usual tropical abscess which follows dysentery, there was no history of that disease or of diarrhœa; yet the amœba coli which was found in abundance in the pus which escaped after incision shows that it was essentially of the same nature.

The patient, a man aged thirty-seven years, was, on Oct. 28th, admitted to the Seamen's Hospital, Greenwich. He had been seen some four or five months previously by a medical man in Calcutta, who had advised him to return to England. On admission he was so weak and emaciated that he had to be carried in, and appeared to be so exhausted from the slight exertion of being carried from the ship that he was hardly able to speak. There was no history of any previous serious illness. The patient was an able seaman, and for the previous five years he had been employed on ships trading to Bombay and Calcutta, but he had never stayed on shore for more than three weeks at a time. For the previous two years he had been subject to attacks of pain in the epigastric region after food, but there was no history of hæmatemesis and only very occasional sickness. There was also no history of dysentery or, in fact, of diarrhœa of any kind; on the contrary, he had always been most regular in his functions. He had never had malaria. The present illness commenced eleven or twelve weeks before admission with pain in the upper part of the abdomen; the pain was not continuous, but used to intermit a good deal, coming on chiefly at night and lasting for about half an hour at a time. About seven weeks before admission he noticed a swelling about the size of a hen's egg in the upper part of the abdomen and in the middle line which had increased rapidly in size. During the whole period he had wasted rapidly. On examination there was found to be a large tumour in the epigastric region occupying the whole space between the ensiform cartilage and umbilicus, the size being about that of the fœtal head at term. The swelling was generally rounded except at the central point, where it bulged slightly, the skin here being reddened. The percussion note over the tumour was dull; there was fluctuation, but it was not distinct, the tumour being very tense; no thrill was present, but there was distinct pulsation, which, however, was not expansile. On careful examination the pulsation was found to be greater at the upper part of the tumour, diminishing towards the lower end, so it was probably transmitted straight from the heart. The percussion dulness was continuous with that of the liver, which began at the sixth rib above in the nipple line. The edge of the liver was not felt below the costal margin; the tumour itself prevented examination of the left lobe. The spleen was not felt. The urine was normal. Nothing else abnormal was detected in the abdomen. The heart area of dulness was normal and the sounds were healthy. The lungs were clear. The skin was moist but of somewhat earthy colour. The face was drawn and wan. The temperature ranged between 99·2° and 102° F. No jaundice was present. On Oct. 31st ether was

administered. In the absence of Mr. Turner, through an accident, Mr. Isaacs made an incision about three inches in length in the mid line through the reddened point. A large quantity of chocolate-coloured pus was at once discharged, followed by a smaller flow, accelerated by each effort of inspiration. On passing the finger into the wound he found that there were two distinct cavities. The superficial one was connected with the deep or intra-abdominal cavity by means of a small opening, apparently between the recti, which just admitted the finger. This hole he enlarged, thereby facilitating the discharge of more pus, the whole amount at the operation being rather more than two pints. The boundaries of the intra-abdominal cavity could not be made out with the finger, but a probe could be passed a long way straight backwards and to the left. A large-size drainage-tube about five or six inches in length was passed into the cavity, and the case was dressed with cyanide gauze and wood-wool pads. The temperature fell on the day following the operation to 98°, and remained subnormal until Nov. 14th, when the patient, through restlessness, got rid of the tube, which remained out for twelve hours. The temperature at once rose to 98·8°, and Mr. Isaacs found the hole between the recti so contracted that a tube could not be passed until it had been dilated afresh. The tube was changed about once a week and was very gradually shortened, and finally removed on Jan. 6th, 1896. The quantity of pus discharged was very large for the first three weeks after the operation, gradually diminishing after this. The patient rapidly regained strength and must have gained 3 st. in weight since admission, when he was unfortunately not weighed. The pus was examined directly after operation, but no amœbæ were found on that day. Two days after the operation, however, the pus was found on examination on the warm stage to contain large numbers of the amœbæ coli, which were found daily for ten days. The amœbæ were of various shapes; more commonly they were noticed to be of greater length and breadth (three or four times), with irregular margins which were never uniform on account of the constant protrusion of pseudopodia. These processes were, as a rule, short and blunt, except when they were used for the purpose of enclosing some material, in which case one single pseudopodium was thrown out and encircled the desired material, usually a red blood corpuscle. Of these bodies as many as twenty could be counted in a single amœba. The distinction between ectosarc and endosarc could not be made out with a quarter-inch objective. The nucleus with nucleolus was occasionally but not invariably seen. Numerous granules and vacuoles were seen. Some amœbæ were kept alive and under observation on the warm stage for nearly twelve hours, exhibiting active movements the whole time.

Remarks by Mr. ISAACS.—Up to the time of operation no actual diagnosis as to the cause of the abscess was made. The possibility of its being a subphrenic abscess, secondary to an old gastric ulcer, was somewhat discounted by the fact that although there was a history of dyspepsia the symptoms were hardly grave enough to indicate gastric ulcer. The percussion note also was dull and not tympanitic. In the second place, hepatic abscess seemed unlikely as the liver was not enlarged either upwards or downwards, while the abscess itself masked the left lobe. Beyond this it was quite impossible to get any history of dysentery. In a case published by Dr. Curnow in THE LANCET of May 4th, 1895, the patient had a sharp attack of dysentery three days after operation, but in this case the patient never had the least symptom of dysentery during his whole stay of nearly three months in the hospital. The presence of the amœba coli in healthy evacuations has been demonstrated by Losch, and this seems to point to the necessity of lowered vitality in the intestine, in order that the amœba may get a foothold and so cause the symptoms of dysentery. In the absence of any dysenteric symptoms it may be inferred that the intestine in this case was in a healthy condition, and yet the patient presents an undoubted abscess of the liver yielding specimens of the amœba. The difficulty is to explain the migration of the amœba from the intestine to the liver in the absence of ulceration, or at any rate of that amount which would give rise to the symptoms of dysentery. Another point which seems worthy of special note is that although careful search was made no amœbæ were found in the pus discharged at the time of operation, although they were found in large numbers for some days subsequently. (The pus examined at the time of operation was some of the first discharged.) This feature has been similar in five cases in which I have seen observations made, and seems to point to the fact that the living amœbæ, at any rate, keep close to the wall of the abscess, and examination is more likely to be profitable if made on the pus evacuated last. I am indebted to the kindness of Mr. G. R. Turner for leave to publish this case.

SALFORD ROYAL HOSPITAL.

THREE SURGICAL CASES, (1) NEPHRO-LITHOTOMY; (2) NEPHRORRHAPY; AND (3) NEPHRECTOMY.

(Under the care of Mr. HERBERT LUND.)

THESE cases afford good examples of operation for various renal affections only amenable to surgical treatment. The first shows the more recent method of opening the kidney for the removal of a stone when there is no pyonephrosis and the exact location of the stone cannot be defined by palpation. In the second we would draw attention to the effective method practised of securing the kidney in the loin and the excellent effect produced in the relief of the intermittent hydronephrosis which had given so much suffering. The third case is probably the one which will attract most attention and is of most interest to the profession. The future course of the case should be carefully watched. There have been few similar cases recorded, and the resemblance of the symptoms produced to those caused by calculus of the kidney or tuberculous disease of that organ is very misleading. Even when the kidney was exposed there appears to have been a very close resemblance to a growth of malignant nature.

CASE 1.—An anæmic-looking boy aged sixteen years was admitted into the Salford Royal Hospital on Aug. 16th last with the following history. He had never had any trouble with the bladder until 1891, but in that year whilst trying to pass urine the stream suddenly stopped, and after some straining a small calculus about the size of an orange pip was passed per urethram. Previously to this occurrence there was no history of any attack of pain during the passage of the stone along the ureter. Soon after this, in the same year, he had severe pain in the right side, accompanied by sickness, and he then passed eight small stones in one day. Whether any blood was passed with the stones is not definitely known. In 1893 a small stone became impacted in the urethra and was removed under chloroform, and this operation had to be repeated in 1894. On four separate occasions the boy was admitted into the hospital with a view to operate upon the kidney, but as the symptoms all subsided with rest in bed active measures were postponed until finally, on Oct. 23rd last, the exploration took place. From Aug. 16th to Oct. 23rd, when waiting for operation, the patient was fairly comfortable, but had occasional attacks of pain in the right loin with hæmaturia, and there was also tenderness on pressure over the right kidney, but no enlargement of the gland could be detected. The urine was acid, of specific gravity 1015, and contained albumin, pus, calcium oxalate crystals, epithelial cells, and occasionally blood. The kidney was exposed by an incision parallel to the last rib, the gland being well pushed up to the surface by pressure applied by the house surgeon, Mr. Knight, through the abdominal wall. The convex border of the kidney was then incised for half an inch, and the hæmorrhage, which for the moment was severe, was easily checked by the operator's index finger, which was inserted into the wound. The pelvis of the gland was dilated and contained two calculi, the larger weighing 106 grains and the smaller six grains, composed of oxalate of lime with a thin coating of phosphates in places on the surface. A small drainage-tube was passed into the renal pelvis; the deeper layers of the wound were brought together with catgut and the skin with horsehair sutures. The subsequent course of events was as follows. On the 25th the drainage-tube was removed. The evening temperature was 100° F. and the pulse was 98. Thirty-one ounces of urine were passed containing much blood. The patient suffered from great pain, owing probably to the passage of blood-clot along the ureter. On the 29th the temperature was 93·4°. On Nov. 6th there was no blood in the urine, for the first time since the operation. On Dec. 1st the wound had quite healed; there had been no trace of blood since Nov. 20th, when a small clot was passed. The temperature had been normal since Nov. 4th. On the 11th he left the hospital.

CASE 2.—A well-nourished, healthy looking girl aged twenty-two years, with a good family history, was admitted to the hospital on Sept. 26th last, and gave the following account of herself. In the autumn of 1894 she received in the right iliac region a blow from the handle of a small coal-truck. In the spring of 1895 she was kept in bed for "inflammation of the bowels," as there was a swelling in the right side in the right iliac fossa. In this attack the right leg was drawn up, and the patient could not walk for three or four weeks owing to pain in attempting to straighten out the thigh. After this she could get about, but limped in walking, and the swelling again reappeared when she returned to her work. On Aug. 13th the patient was admitted into the hospital suffering from a large tender swelling occupying the right iliac fossa. It was semi-fluctuating and closely simulated an abscess in the region of the psoas and iliacus. When put to bed, however, the swelling almost entirely disappeared in a day or two, and there remained a mass about the size of an orange in the iliac region, tender to the touch and apparently fixed, but its deeper relations were not very carefully noted at the time. On Aug. 24th the patient felt so much easier that she determined to go home, but returned in great pain on the following day, and it was then decided to examine the condition by an exploratory operation. On Sept. 30th, under chloroform, an incision three and a half inches in length was made, its centre being an inch and a half internal to the anterior superior spine and parallel with Poupart's ligament. On opening the peritoneal cavity the presence of a movable kidney was easily detected lying close to the brim of the pelvis, the iliac fossa being quite free. The wound was closed with deep catgut and superficial horsehair sutures and primary union was obtained. On Oct. 25th the kidney was exposed in the lumbar region and forced into the wound by means of an assistant's hand applying pressure through the abdominal wall. By means of six silkworm gut sutures the kidney was then sutured to the skin and superficial structures, so that the surface of the organ was almost level with the surface of the skin. The wound was next lightly packed with iodoform gauze and the patient kept carefully at rest in the dorsal position. The wound was not touched for fourteen days and then showed a healthy granulating surface. A second rest of a week was allowed and after this the patient was permitted to roll upon her side for a change. On Dec. 11th there was a firm contracting cicatrix. For a few days after the operation a trace of blood appeared in the urine, for the sutures were carried well into the kidney structure, but this soon disappeared. The temperature only once rose to 100° F. and this was after the exploratory operation and not the second one. Up to Jan. 29th there had been freedom from pain and there had been no evidence of the kidney slipping down again. No belt was ordered, but the patient was cautioned against wearing anything tight in the shape of waist-bands.

CASE 3.—A youth aged nineteen years was admitted into the hospital on March 4th last under the care of Dr. Edge. For two years previously he had suffered from pain in the back, particularly after any unusual exertion. Twelve months before admission he had noticed blood in the urine, but this sign did not accompany or follow an attack of pain. In March, 1894, the hæmaturia lasted three weeks, in December ten days, and in April, 1895, about five days. He complained of pain shooting down both thighs, but not into the scrotum. Some swelling was said to have been noticed under the eyes occasionally. On May 18th he was discharged much relieved; during his stay in the hospital attacks of pain occurred which were chiefly confined to the left side, and were accompanied by hæmaturia and occasionally vomiting. The urine was fair in quantity and acid. On Oct. 10th he was readmitted. The urine contained crystals of uric acid and a trace of albumin. He suffered from much pain in the back. On the 18th there was no albumin in the urine. On the 22nd he suffered from hæmaturia. On the 31st the urine contained a quarter of a gramme of albumin per litre and was slightly tinged with blood. There was pain in both loins. On Nov. 7th there was a trace of albumin in the urine. On the 14th severe pain, commencing on the left side, supervened; the urine was red with blood. On the 15th the pain was better. The morning urine was as dark as porter in colour; the quantity in twenty-four hours was twenty-one ounces. The temperature was 102·2° F. On the 18th a rigor occurred; the temperature was 104·2°. On the 21st there was less blood in the urine, and on Dec. 2nd it was slightly tinged with blood. As the pain was now localised chiefly in the left loin, and the case appeared to be one of renal calculus, Dr. Edge asked his colleague, Mr. H. Lund, to take charge of the case with a view to operation on Dec. 7th. The left kidney was exposed by the usual lumbar incision without much difficulty. It appeared to be much congested, being of a deep purple colour, and was certainly increased in size. No calculus could be made out by palpation and no exploratory puncturing with the needle was tried. A small incision was then made in the convex border and the finger inserted. The kidney substance was extremely soft and friable and the hæmorrhage so profuse that the suggestion was made that the enlargement was due to malignant growth. As plugging the wound failed to arrest the hæmorrhage, and the patient was evidently in a serious condition from loss of blood, it was deemed advisable to remove the kidney. This was rapidly done by passing a thick silk ligature round the pedicle, and then, to make all secure, Spencer Wells's forceps were placed distally to the ligature and the kidney removed. On examination it was found to be a "large white" kidney, extremely friable, but there was no calculus. On the day of the operation the temperature fell to 99°; twenty-seven ounces of urine were passed in the twenty-four hours, containing a fair quantity of blood. On the 8th fifty-five ounces of urine were passed in the twenty-four hours, and on the 9th the amount was sixty-six ounces, the specific gravity being 1010. The wound was dressed and the forceps were removed. On the 16th the urine was without blood for the first time since the operation. The patient had lost all pain—in fact, pain had been entirely absent since the 8th. On the 17th there was a trace of albumin in the urine, the latter amounting to eighty-seven ounces; the specific gravity was 1010 and there was 1·35 per cent. of urea. On the 31st the urine had varied in amount from sixty to ninety-five ounces in the twenty-four hours. The patient was up on a couch. On Jan. 8th, 1896, he left the hospital. The wound had healed; there was freedom from pain. The urine contained 0·7, 0·8, and 0·97 per cent. of urea; no blood, but occasionally a trace of albumin was present; the specific gravity was 1016. The quantity in the twenty-four hours averaged sixty-six ounces.

Remarks by MR. LUND.—Case 3 is extremely interesting for many reasons. The patient was kept under observation for some time, and it was only when all the symptoms of renal calculus appeared to be localised in the left side that operation was agreed upon. The friability of the kidney was alarming; the incision made was small, just sufficient to admit the finger comfortably; but although no force was used the kidney was felt to split in several directions, and plugging was useless to arrest the hæmorrhage. The relief to all symptoms since the operation has been complete, and the patient looks strong and well; the amount of urine passed is satisfactory, but at times the quantity of urea excreted is much below the normal. For the good results obtained in the three cases my thanks are due to the house surgeons, Mr. Knight and Mr. Ray, for their careful attention before and after the operations.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The Parasite of Malaria.

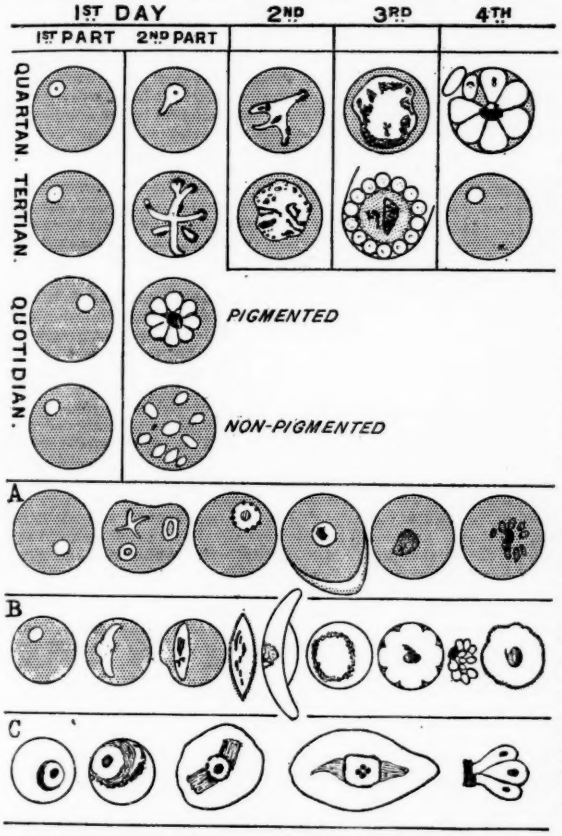
AN ordinary meeting of this society was held on Feb. 11th Mr. LANGTON, Vice-president, being in the chair.

Lord Kelvin D.C.L., F.R.S., was elected an Honorary Fellow of the society, and the following were elected Foreign Honorary Fellows:—Professor Erb, Heidelberg; Professor Fournier, Paris; Professor Koch, Berlin; Professor Laveran, Paris; Professor Pierre Marie, Paris; Professor von Bergmann, Berlin; Professor Czerny, Heidelberg; Professor Kocher, Berne; and Dr. Weir Mitchell, Philadelphia.

A discussion on the Parasite of Malaria, with special reference to the Malarial Fevers of the South of Spain, was opened by a paper by Dr. R. J. MARSHALL and Dr. GEORGE THIN. After a preliminary sketch of the present position of the doctrine of the etiology of malaria, they gave the results of a study of the parasites of the malarial fevers which occurred in the province of Huelva in the

south of Spain, and described the chief characteristics of these fevers. The parasites found included those of the quartan and tertian fevers; and Golgi's description of these parasites was verified in every detail. Under the title of "irregular fevers" cases were described and discussed in which the parasites found were similar to the quotidian parasite of Marchiafava and Bignami. In some of these cases the crescent form did not occur. Other cases were studied in which the parasite found resembled in the early stages that of the quotidian, but was associated in the later stages with the crescent form. Whether the crescent form was a separate species, as was believed by Grassi and Feletti, or was a peculiar development of the quotidian parasite, was briefly discussed. Nine selected cases were described in detail, with microscopical appearances and temperature charts, and they included examples of quartan, tertian, quotidian fevers, fevers associated with the crescent body, slighter cases with comparatively scant microscopic appearances, and cases of mixed infection (the tertian parasite with that of irregular fevers). The question of how the parasite gained admission into the human body was discussed in the light of the conditions which prevailed in the part of the province of Huelva where the cases occurred. Remarkable examples were given of the strict localisation of foci of infection, from which it was inferred that the parasite was not carried about freely by currents of air. Here, as elsewhere, it was found that combined heat and moisture, particularly when associated with disturbance of the soil, favoured the access of the parasite to the human body. The facts supported the conclusion come to by the Italian authorities that drinking water was not the usual medium by which the poison was conveyed, and they were strongly against the theory suggested by Laveran, Pfeiffer, and others that mosquitoes and other insects might act the part of an intermediate host, in this respect supporting the negative conclusions of the Sicilian physicians. The reports of the cases were furnished by Dr. Marshall, who attended the patients and who examined the freshly drawn blood. The dried and stained preparations were studied jointly by both Dr. Marshall and Dr. Thin.—Dr. THIN added that he thought the length of time during which the malaria parasite could be found latent had been much overstated. He had observed one case in which the periodicity was very long—a thirty-day fever. It should be borne in mind that quinine only killed the free spores of the parasite and did nothing else. In quotidian ague it was necessary to administer repeated very large doses of quinine. Arsenic had no effect on the parasite.

Diagram explanatory of the varieties of the parasite of malaria.



The columns marked QUARTAN, TERTIAN, and QUOTIDIAN show the development within the respective periods. The drawings of the quartan and tertian parasites are copied from Golgi, and the pigmented and non-pigmented quotidian from Bignami. The drawings opposite A are selected from those in Marchiafava and Bignami's work to show their views as to the development of the quotidian parasite. Those opposite B illustrate Grassi and Feletti's views regarding the development of the crescent form. Those opposite C show the rare forms of sporulation which they describe. B and C are from Feletti's work.

Dr. CURNOW said that while congratulating Dr. Marshall and Dr. Thin on the care and trouble they had expended in putting these results before the society, he desired to refer critically to certain points in their paper. It was a remarkable fact that while in England they were discussing not only whether a plasmodium had any connexion with malarial fever, but whether a given variety of plasmodium produced a given variety of fever, Surgeon-Lieutenant-Colonel Lawrie, working in India, had boldly stated that a plasmodium had no connexion with the fever, and that in studying these pigmented bodies we were only concerned with the vagaries of a leucocyte. For his own part, he (the speaker) had been well acquainted with the plasmodium for many years, the first he had seen being brought from Rome by Professor Crookshank and shown to him some eight or nine years ago. Since then he had seen numerous examples at the Seamen's Hospital, Greenwich, many of which had been prepared by Dr. M. Spencer, the late house physician. The paper before them concerned itself chiefly with two distinct questions: (1) the varieties of the plasmodium and the relation of them to the fever, and (2) the question of the etiology and spread of malarial fever. With regard to the first of these two questions, the circular or amœbic form of plasmodium was common to all forms of malarial fever. With regard to the pigmented forms of plasmodium which were found, there were many differences between these which he believed were accidental, and were not to be regarded as foundations for varieties of fever. He recognised four chief forms of plasmodium: (1) the circular or amœbic form found in all acute cases, and which might at a certain period become (2) the flagellated form, of which he had seen many examples in quotidian, tertian, and mixed fevers; (3) the rosette forms which perhaps were only found in tertian and quartan forms of fever; and (4) the crescent forms which were found in all forms of malarial fever, and especially in the chronic and persistent varieties—the forms least acted on by quinine and most obstinate to treatment. It was possible that the crescentic forms were derived from the circular or amœboid, and asked what evidence there was that there was a distinct form of malarial fever associated with a crescentic plasmodium. The suggestion in the paper that there might be as many varieties of parasite as there were varieties of fever was not borne out by the supporting cases. He criticised the first case related in the paper, called quartan fever, as destitute of any clinical evidence that it was quartan at all. The administration of quinine after the first appearance of the symptoms had destroyed the value of the evidence derived from after-examinations of the blood. The third case was diagnosed as double tertian fever solely from the microscopical appearances; clinically it was a typical case of quotidian fever. For such a study it was necessary to take cases of simple quotidian, tertian, and quartan ague and to study them free from the interference of quinine. To start from the microscopy of the blood was to argue in a vicious circle. As to the introduction of the plasmodium into the system,

whether it was air- or water-borne, the general question could not be argued from the experience of local areas in Spain or Italy. The air-borne theory was universally accepted, but, nevertheless, it was not correct to say that there was no such thing as water-borne malaria. Boudin's classical case must first be disproved, in which 120 soldiers returned by ship from Algiers to Marseilles; 103 of them who drank marsh water contracted malaria, while the sailors, who had good water, all remained well. The cases which they saw in the Seamen's Hospital were from ships which took in river water at ports like Savannah, Moulmein, Rangoon, and on the Danube and mouth of the Panama Canal. Often the sailors on the ships had not been on shore, and then there was the evidence that other ships which called at the same ports, but which used condensed water, very rarely had their crews affected with malaria. With regard to the question of propagation by the mosquito he thought that there was a long gap between the finding of the flagellum in the mosquito and the plasmodium in man. The great point in the treatment was prophylaxis. He advised those going into a malarial district to take as much quinine as would lie on a florin with their coffee every morning, and he referred to the experience of officers on telegraph ships spending as much as five months laying cables on the west coast of Africa and calling frequently at ports along the coast, remaining, nevertheless, free from malaria.—The debate was adjourned till the next meeting of the society.

MEDICAL SOCIETY OF LONDON.

Dislocation of the Hip into the Obturator Foramen treated by Excision of the Head of the Femur.—Unreduced Dislocation of the Hip into the Obturator Foramen.—Laminectomy for Paralysis due to Cervical Caries.—Exostosis of Orbit.—Two cases of Sinus over the Sacrum and Coccyx.—Colotomy and Subsequent Enterectomy for Cancer of the Upper Rectum.—Three cases of Hereditary Congenital Nystagmus.—Pott's Fracture treated by Early Movement and Massage.—Restoration of the Os Calcis after Extensive Removal of Carious Bone.—Favus of Scalp and Nails.—Scrofuloderma of Face.

AN ordinary meeting of this society was held on Feb. 10th for exhibition of clinical cases, the President, Sir JAMES CRICHTON BROWNE, being in the chair.

Mr. JOHNSON SMITH showed a case of Dislocation of the Hip into the Obturator Foramen treated by Excision of the Head of the Bone. The patient was a sailor aged thirty, who sustained a very severe injury on Dec. 4th, 1892, when a heavy sea was running in the Bay of Biscay. He was knocked down and lost consciousness, and when he recovered he could not stand or move his left leg. The captain did not attempt reduction, but later he was taken to a small hospital in an Italian port. There two futile attempts were made to reduce the dislocation under an anæsthetic. He was admitted to Greenwich Hospital on April 5th, 1893, and then presented well-marked signs of obturator dislocation. On April 18th Mr. Johnson Smith chiselled through the neck and removed the head of the femur. The good result obtained was discounted by the fact that paralysis of the extensor muscles had followed and the foot was now in a faulty position.

Mr. G. R. TURNER showed a case of Unreduced Dislocation of the Hip into the Obturator Foramen. The patient was a sailor aged twenty, who, three months before admission, while standing at the side of the ship, was knocked over by a sea, falling on to his right side in a half-sitting position, with his right leg doubled under him. Eight weeks after the accident several attempts were made at reduction, both with and without an anæsthetic. Later a medical officer on board ship again attempted reduction with block and tackle under an anæsthetic, but without success. The thigh was flexed and the foot everted. The head of the femur lay nearly in the perineum under the scrotum. The thigh could be flexed on to the abdomen, but could not be extended. Rotation was limited. The limb was shortened 1½ in.; the patient could only limp and was obliged to hobble about with a stick. Under ether manipulation such as was usually adopted in obturator dislocation showed extensive adhesions to exist; these were broken down. The limb could then be made to assume something like the position of a dorsal dislocation, but all attempts at reduction were unavailing. Crepitus of an uncertain nature could both then and now be felt on flexing the thigh on the abdomen. Mr. Turner brought the case before the society, not only as a fellow to the one shown by Mr. Johnson Smith, but also for diagnosis. He thought there was a dislocation into the obturator foramen with possibly some fracture of the neck of the femur, and that attempts at reduction having failed the proper course would be to excise the head of the bone. Rectal examination did not disclose any fracture of the pelvis.—Mr. NOBLE SMITH thought that the first case would be benefited by tenotomy followed by the support of an iron for the foot and leg.—Mr. SHEILD said the day was now past for the old and violent methods of reducing old dislocations by blocks and tackle. He had twice seen paralysis follow from partial tearing of the sciatic nerve. He regarded the second case as one of fracture dislocation on account of the shortening.

Mr. COTTERELL showed a case of Laminectomy for Paralysis due to Cervical Caries. The patient was a girl aged thirteen years, who was admitted on May 4th, 1895, into the West-end Hospital for Nervous Diseases under the care of Dr. Wallis Ord. Upon admission the patient was found to be a well-grown girl, with fair hair and widely dilated pupils. On the right side of the neck there was an old scar due to removal of an enlarged gland five years ago, and there were now some enlarged cervical glands to be felt in the neighbourhood of the scars. The head was rigidly fixed and had been so for eighteen months before admission, owing to old caries of the cervical vertebræ. There was no pain on pressing upon the top of the head or when the heels were jarred on the floor. Upon examining the pharynx there could be felt a projection forwards of some of the bodies of the cervical vertebræ behind the soft palate. There was paralysis of the right arm, which was not quite complete on the ulnar side. The loss of power was said to have come on nine weeks before admission, and was attributed by the parents to a chill contracted during the severe cold of last winter. The right hand was cold and blue. The child was not subject to fits. On admission the patient could feed herself with the left hand, but gradually the side became affected, and then power was lost in the right leg and afterwards in the left one, the patient dragging them when she walked. On June 11th galvanism to the spine was ordered, but as the loss of power became worse this treatment was stopped. On July 1st he removed the spines and laminæ of the fourth, fifth, and sixth cervical vertebræ. No granulations or carious bone could be detected anterior to the cord. The dura mater was not opened. The wound healed by first intention. On July 3rd she began to move the left hand. On July 5th she moved the left hand and arm, and could hold it up. On July 10th she moved the right hand slightly. On July 15th she could raise the right hand and arm above the head. On Aug. 5th the patient sat up for an hour. By this time she had regained power in her legs. On Oct. 25th she was examined and found to have complete power of movement and no loss of sensation. There was no pain or tenderness of the neck, which was stiff and could only be moved very slightly.

Mr. COTTERELL next showed a case of Orbital Exostosis. The patient, a thin, poorly-developed, anæmic-looking lad aged eighteen, was admitted to the Cancer Hospital, Brompton, on Dec. 6th, 1895, with marked protrusion of his right eyeball and displacement downwards and outwards. He had a strong family history of carcinoma, his mother and mother's brother having both died of "cancer of the face." He had had no previous serious illness and had always been fairly strong. Two and a half years ago he first noticed a small lump of the size of a pea in the inner angle of the orbit. It had increased steadily up to the present, but the patient himself and his friends stated that during the last six months it had grown much more rapidly. There had never at any time been any pain. On admission the eyeball was much displaced downwards and outwards, the lower edge of the cornea being about half an inch lower than on the other side. The movements of the ball were good in all directions. The pupils were dilated, equal and regular. There was diminished acuity of vision. There was no evidence of loss of function in the supra-orbital and supra-trochlear nerves. On ophthalmoscopic examination the media of the eye were clear. There was marked blurring of the edges of the disc and congestion, the disc being nearly of the same colour as the rest of the fundus oculi, veins full, with small arteries. There was optic neuritis. A very hard, nodulated, firmly-fixed swelling in the inner and upper part

of the right orbit was felt; on deep pressure it was felt extending under the supra-orbital ridge half way across the orbit. It was uniformly hard all over, and there was no tenderness. On Jan. 11th, 1896, an incision was made along the supra-orbital ridge through the eyebrows, the eyelids being secured to each other by two horse-hair sutures. The periosteum was incised and peeled down till the tumour was reached. It was found to occupy nearly the whole of the upper and inner part of the orbit. It was firmly fixed, and in appearance like a peeled walnut. There was a sort of pedicle joining it to the supra-orbital ridge at its inner extremity about half an inch wide. The periosteum was peeled down this, and it was then cut with a chisel and mallet. While this was being done it was found to move, and was levered out, coming away quite easily, being attached to the roof of the orbit at its upper and inner aspect. The wound was packed with gauze, a drainage-tube having been inserted into the cavity and the incision sutured with catgut. On the following day the sutures in the eyelid were removed and the plug taken out. There was very little effusion into the cellular tissue. On the fourth day there was a small collection of fluid—broken-down clot—at the outer aspect of the orbit; this was let out, and the wound healed up rapidly. The patient had now good movement of the eyeball in every direction. About five days ago a hard lump the size of a small filbert was found in the inner angle; this had grown rapidly less since. The blurring and congestion of the disc had now practically disappeared, and the displacement of the eye was very much less.

Mr. GOODSALL showed two cases of Sinus over the Sacro-coccygeal Articulation, which brought up the total number of such cases he had seen to fourteen. He laid the sinuses open in every direction, scraped them, packed with dry wool, and applied a fomentation. They both healed rapidly. The average age of the fourteen cases had been twenty-eight years, the left side was usually affected, and there was a history of injury in the great majority of cases.

Mr. J. MACREADY showed a woman who had suffered from Cancer of the Upper Rectum, Colotomy, and subsequent Enterectomy. This patient, aged fifty-three, was admitted on May 24th, 1895, suffering from intestinal obstruction. She had had several attacks, keeping her in bed for a week or ten days at a time. No alteration had been observed in the shape or size of the motions. Six days before admission she had pain in the hypogastrium, which soon diffused over the abdomen. The bowels acted slightly in the morning, but not at all since. Vomiting began in the evening of the same day and was fæcal on admission. The abdomen was much distended, resonant, and tympanitic. Nothing could be felt by rectal or vaginal examination. The abdomen was opened in the middle line, when a hard mass of new growth could be felt and seen at the junction of the sigmoid flexure with the rectum. The growth had not involved neighbouring parts of the bowel, and could not be drawn into the left iliac fossa. He closed the abdominal wound and performed left inguinal colotomy. In view of the severe symptoms of obstruction the sigmoid flexure was sutured to the edges of the wound and opened by a simple longitudinal incision. The bowels acted more freely each day, but the patient remained very ill. Four weeks after the first operation he proceeded to remove the cancerous mass by median laparotomy. The diseased gut was then cut away and the divided ends united, the mucous membrane with interrupted silk sutures and the two outer layers by numerous Lembert sutures. The growth proved to be a typical cylindrical-celled carcinoma. On July 17th, twenty-six days after the second operation, he closed the artificial anus, and the patient left the hospital on Aug. 14th, 1895. The bowels were then acting naturally, and since that time she had had no difficulty in this respect.

Dr. T. OUTERSON WOOD brought before the society an interesting set of cases which are by no means common; they were three cases of Hereditary Congenital Nystagmus occurring in the same family—viz., a brother and two sisters. The cases were hereditary inasmuch as the father's mother was stated to have had large prominent eyes which were always "on the work," and they were congenital because they had always had this movement. The father and mother were healthy people, were no relation to each other, and, as far as could be ascertained, both came of a healthy stock free from nervous affections. There were four members of this family, two brothers and two sisters, of whom three were shown. The other brother, aged thirty years, had prominent eyes, grey irides, no sight defect, and his eyes were quite steady. The elder sister was twenty-six years of age, married, and had one child, a boy about three years old, perfectly healthy. She came to him in the first instance as an out-patient at the West-end Hospital for Nervous Diseases seeking advice for nervous depression. The pupils were equal, acted well to light and accommodation, and there were no fundus changes. Mr. Work Dodd had investigated the refraction and found that she had some myopic astigmatism. The second sister was also a healthy woman aged twenty-five years, and had been married some months. The boy was fifteen years of age and had nystagmus, but in a less degree than his sisters. Mr. Dodd found he had hypermetropic astigmatism of the right and mixed astigmatism of the left eye. The literature of hereditary congenital nystagmus was very scanty. At the annual meeting of the British Medical Association held in London last July Dr. Angus McGillivray read a most interesting paper entitled "Hereditary Congenital Nystagmus Associated with Head Movements," in which he gave an account of two families in which nystagmus occurred. In the first one after skipping a generation it came out in three cases in the second generation and three cases in the third. In the second group there were four members of a family of nine who had nystagmus, the others being free from it. Dr. McGillivray also mentioned that his colleague, Dr. Mackie White, had under his care five cases of nystagmus in one family, and referred also to a paper by Mr. Lloyd Owen in the *Ophthalmic Review* for 1882, where nine cases were noted in four generations.

Mr. NOBLE SMITH showed himself as a case to illustrate the Treatment of Pott's Fracture by Early Strapping, Early Movement, and Massage. On Nov. 13th, 1895, he had a fall, fracturing both tibia and fibula, rather more than the internal malleolus in the tibia, and the fibula just below its centre, and probably also at its lower extremity. The foot was turned completely outwards, the fragment, including the internal malleolus, being separated from the shaft by over an inch. The fracture was reduced immediately and strapping applied to the foot and ankle within half an hour of the accident and before any appreciable swelling had occurred. The strapping was just laid on without any attempt to produce pressure, and was readjusted almost daily in accordance with the increase of tension, which, however, was very slight. The strapping was discarded upon the seventh day. The ordinary back splint, supporting the leg, thigh, and foot, and with side pieces, was applied from the first. At the end of a fortnight plaster-of-Paris splints, one on each side, were substituted for the wooden side-splints. Very gentle movement of the ankle-joint was kept up from almost the first. Massage was begun slightly during the first week and gradually increased in extent until the end of the third week, when the side splints were taken down, one at a time, twice a day for regular massage, care always being taken to avoid disturbance of the fractured bones. Movement and massage caused no pain. The latter was especially comforting. On the twenty-first day he could bear the weight of his body on the foot of the injured leg for a moment. On the twenty-third day he could walk with caution, resting after each step. He felt no difficulty except weakness in the joint. On the thirty-second day he could flex and extend the foot to one-third of an inch of the sound one. Measurement round the ankle was only three-eighths of an inch more than the sound one. On the thirty-fourth day he gave up crutches, walking easily with two sticks. He also dispensed with splints during the day. On the thirty-fifth day (end of the fifth week) he gave up splints entirely. On the thirty-eighth day (five weeks and three days) he rode a horse in Rotten-row. He had a short gallop. He had no difficulty except from weakness of the thigh muscles. Next day he rode again and galloped three-quarters of the length of the row and back. On the forty-second day (sixth week) he walked two miles with sticks. He was a little tired, but there was no increase of the swelling of the leg. After six weeks and two days he hunted with the Queen's Staghounds, riding a young, high-couraged horse. He did not jump. At the end of the seventh week he hunted with the Queen's Staghounds, and rode eight miles across country.

Mr. HERBERT WATERHOUSE showed a girl aged seven, who was admitted to the Victoria Hospital for Children, suffering from Tuberculous Disease of the left Os Calcis. There was a strong tuberculous family history. Four months before admission she limped, walked on tip-toe, and complained of pain in the heel. On admission a fluctuating swelling was

found over the outer aspect of the os calcis. A curved incision was made, the peronei tendons stripped of their tuberculous synovial membrane, and the whole interior of the os calcis was scraped away together with the outer and part of the lower walls. The cavity left was packed tightly with decalcified bone chips and iodoform and the skin sutured. It healed by first intention. He had adopted this method with success in seven other cases, and believed that the chips merely acted as a temporary aseptic scaffolding and were replaced by new bone.

Dr. EDDOWES showed a girl aged eighteen with Favus of the Scalp, which was typical microscopically, but had no mousy odour and formed no cups. There was favus also of the nails of the thumb and forefinger.

Dr. EDDOWES likewise showed a man aged twenty-five who had suffered for fourteen years from Scrofuloderma of the Face, which rapidly healed under scraping and the application of a plaster of carbolic acid and mercury.

OBSTETRICAL SOCIETY OF LONDON.

Abdominal Hysterectomy with Intra-peritoneal Treatment of the Stump.—Annual Address.—Exhibition of Specimens.

A MEETING of this society was held on Feb. 5th, Dr. F. H. CHAMPNEYS, President, being in the chair.

Mr. HARRISON CRIPPS read a paper on Abdominal Hysterectomy with Intra-peritoneal Treatment of the Stump, with notes of eight cases. He considered that the surgical removal of fibroid tumours of the uterus was called for in the following class of cases: (1) Excessive hæmorrhage, uncontrolled by the ordinary method of treatment, and in which oöphorectomy is impossible; (2) serious pressure effects on the bladder or rectum; and (3) when the pain or the size of the tumour renders the patient unable to earn her living. Mr. Cripps contrasted the extra-peritoneal with the intra-peritoneal method of treatment of the pedicle. The latter gave him the best results. Whilst in the extra-peritoneal method the danger from sepsis was slighter, that from obstruction of the intestine and ureters seemed greater than in the intra-peritoneal method. This greater risk of peritonitis in the intra-peritoneal method was from infection through the vagina. To minimise this risk Mr. Cripps laid stress on two points: (1) Thorough and repeated douching of the vagina with perchloride of mercury; and (2) care in accurately closing the peritoneum over the surface of the stump. Details of the method of operation employed were then given, stress being laid on two points: (*a*) The importance of having sufficient room supplied if necessary by making a long abdominal incision, and (*b*) the method of securing the vessels in the broad ligaments. This depends on whether the layers of this ligament have been separated by lateral burrowing of the tumour or not. Notes were then given of eight cases operated on by the intra-peritoneal method (up to September, 1895). Seven cases ended in recovery; there was one death from sepsis, due to infection from the vagina.—The discussion was postponed till next meeting.

The report of a sub-committee on Dr. Leith Napier's case of solid ovarian tumour was read.

The reports for the year 1895 of the hon. treasurer (Dr. Potter), the hon. librarian (Dr. John Phillips), and of the chairman of the Board for the Examination of Midwives (Dr. Cullingworth) were read and adopted. Vol. XXXVII. of the Society's Transactions was presented.

The PRESIDENT then read his annual address, and a vote of thanks was proposed by Dr. WATT BLACK, seconded by Dr. GALABIN, and carried with acclamation. Votes of thanks were passed to the retiring officers and members of council. Dr. Braxton Hicks was then balloted for as an honorary fellow of the society and declared elected.

The list of officers and other members of council proposed by the council was announced as adopted by the society, no amendments having been proposed according to the recently adopted laws.

The following specimens were exhibited:—

Dr. PLAYFAIR: (1) Slough forming complete Cast of Vagina from a case of Enteric Fever; and (2) Ectopic Gestation.

Dr. W. DUNCAN: 1. Ectopic Gestation removed before Rupture; and (2) Double Tubo-ovarian Cystoma.

Dr. GALABIN: (1) Intra-ligamentous Ectopic Gestation removed after twenty-one years' retention; (2) Tubal Gestation removed at sixth week; and (3) Intra-ligamentous Gestation with intact Fallopian Tube.

OPHTHALMOLOGICAL SOCIETY.

The Visual Effects of Refractive Error.—Uveal Cysts of the Iris.—Atrophy of the Optic Nerve in Three Brothers.—Exhibition of Cases and Specimens.

AN ordinary meeting of this society was held on Jan. 30th, Mr. NETTLESHIP, President, being in the chair.

Dr. GEORGE J. BULL (Paris) gave an account of a series of experiments in which he had endeavoured to reproduce with the photographic camera the effects of the different degrees of myopia, hypermetropia, and astigmatism. The effect of a given error of refraction upon the photographic appearance of the test types was different in certain characteristic respects from the image seen by the eye. By further investigation he arrived at the conclusion that this difference was accounted for by the fact that there was in every case of refractive error an element of monocular diplopia, which he gave reasons for ascribing to the sectors of the crystalline. By adding to the photographic camera a lens which was itself divided into sectors he had been able to produce a photographic image of the test types closely analogous to the visual image with the corresponding error. A series of these photographs was presented at the meeting and will be reproduced in the Transactions.—The PRESIDENT observed that monocular diplopia was not a very common complaint among patients with errors of refraction. He would have thought that had the phenomenon been constantly present it would have been more frequently complained of.—Dr. BULL replied that the phenomenon could be detected at all ages, even in children, but that till attention was drawn to it it was either overlooked or not mentioned through lack of attention.

Mr. EALES (Birmingham) and Dr. SINCLAIR (Ipswich) narrated a case of Uveal Cysts in the Iris in a man aged forty-seven. The condition in the left eye was one of absolute glaucoma, the result of a chronic non-inflammatory glaucoma of some years' standing. Extending into the pupillary area from behind the iris were two dark globular masses. These moved freely with every movement of the eyeball, and on close examination with a magnifying glass fine jelly-like quivering of the surface of each mass was noted. The diagnosis of cystic detachment of the posterior uveal layer of the iris was fully borne out by pathological examination. This was the first case, so far as they knew, in which cystic detachment of the uveal layer of the iris had been diagnosed clinically, though reference was made to other published cases in which this condition was probably present, and attention was drawn to the fine creasing and quivering of the cyst wall as a diagnostic sign between this condition and pedunculated sarcoma of the iris.—Mr. TREACHER COLLINS remarked upon the rarity and interest of the condition.

Dr. F. M. OGILVIE described instances of Optic Nerve Atrophy in Three Brothers who were aged respectively twenty-four, twenty-two, and twenty-seven. In the first one the sight was said to have failed in one night, in the second in three months, in the third in six months. They had all been smokers, but one had given up the habit more than seven years before. In all of them there was a central scotoma; in two there was defective colour vision; in one only the visual fields for white were contracted. The ophthalmoscopic appearances were not very well marked in two of the brothers; there was pallor of the disc, but the atrophy was not of a very high degree in any of them; the vision was much reduced. One of them had improved somewhat under strychnine and galvanic treatment. A peculiarity in the brothers which they shared with others in the family was the tortuosity of their retinal vessels. So far as the family history could be traced there were no others who had optic nerve atrophy. The father and mother had good sight. The latter was one of ten, and there was no history of defective sight among her brothers and sisters. She had had sixteen pregnancies and fourteen children born alive; all the males except the three who were the subject of this paper had died in infancy.—Mr. EDGAR BROWNE and Dr. JOHNSON TAYLOR made some remarks on the cases, which were replied to by Dr. OGILVIE.

The following cases and card specimens were shown:—

Mr. SIMEON SNELL: Alveolar Carcinoma of Upper Eyelid.

Mr. C. D. MARSHALL: (1) Removal of Metallic Chip from the Vitreous by the Electro-magnet; result eighteen months afterwards; (2) Cholesterine in the Anterior Chamber.

Mr. W. ADAMS FROST: Peculiar Ring-opacity of the Cornea.

Mr. HOLTHOUSE and Dr. R. D. BATTEN: Peculiar (? congenital) condition of Optic Disc in a Case of Choroido-retinitis.

Mr. FISCHER: Extraction of Lenses in Buphthalmos.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

The Rationale of the Accepted Treatment of Gout.—Exhibition of Specimens.

A MEETING of this society was held on Feb. 7th, Dr. A. SYMONS ECCLES, President, being in the chair.

Dr. ARCHIBALD GARROD read a paper on the Rationale of the Accepted Treatment of Gout. He pointed out that very little is as yet known regarding the pathology of gout, and drew attention to several fundamental points upon which there is wide diversity of views, such as the importance of the part played by uric acid in the phenomena of gout, the causation of the accumulation of urate in the blood by excessive production or diminished elimination, the place of origin of uric acid in the body, and the substance or substances from which it is formed. The aims of treatment, as far as the uric acid is concerned, were next pointed out, and the therapeutic methods generally resorted to were mentioned. The bearings of such experimental researches as are forthcoming upon the diet of gouty persons, the exercise they should take, the drugs usually employed in their treatment, and the effects of mineral waters and baths were next considered, and the conclusion was drawn that we are not at present in possession of such knowledge of the pathology of the disease as would be required to enable us to formulate a scientific course of treatment. On the other hand, the belief was expressed that the method of treatment usually adopted, although largely empirical in its origin, is capable of giving great relief, and that the results obtained in the treatment of gout are decidedly satisfactory.—Dr. THUDICHUM referred to the conflicting reports of the results obtained in the various plans, dietetic and medicinal, which had been used for gout, it having been affirmed of many of them that in different hands they had done distinct good, distinct harm, or had produced no results at all. He dwelt at length on the work of Dr. Bence Jones and Dr. Roberts and on recent researches in foreign laboratories, but he inclined to the view that clinical experience was a surer guide in the treatment of so complex a malady as gout.

After remarks from Dr. ALDERSON, Dr. CLEMOW, Dr. MASTERS, and Mr. ATKINSON,

Dr. CAMPBELL POPE expressed the opinion that in the treatment of gout the personal factor was of chief importance, for on careful investigation some obvious hygienic or dietetic fault was usually discoverable. With regard to diet he thought this should not be mixed more than could be avoided, and each particular meal should preserve as far as possible its distinctly nitrogenous or non-nitrogenous character, as the case might be.

The PRESIDENT said that in watching the effects of physical exercise, whether taken by the gouty patients themselves or administered to them in the form of massage by others, he had found the plus excretion of uric acid not to last many days, save when the exercise taken is excessive, and then not only is the quantity of uric acid increased, but that of urea also. He then drew attention to the evidence of deficient oxidation in the tissues of gouty persons afforded by the presence of leucomaines in the urine with no increase in the amount of nitrogen excreted, and pointed out the bearings of this fact on the wider view of the pathology of gout which physicians may be shortly driven to adopt.

Dr. GARROD, in reply, referred to the importance of the President's researches on leucomaines, and said that possibly it might be found that while uric acid was, so to speak, the indicator, leucomaines were the real cause of gout.

Specimens of Renal Calculi removed by Nephro-lithotomy were shown by Mr. KEETLEY, Mr. EDWARDS, and Mr. BIDWELL.

MANCHESTER MEDICAL SOCIETY.

President's Address.—Sudden Death in Aortic Aneurysm.—Exhibition of Cases.

A MEETING of this society was held on Feb. 5th, Dr. HENRY ASHBY, President, being in the chair.

The PRESIDENT in his address on Milk and Infantile Disease dwelt strongly on the fact that much of the milk which is supplied to large cities is unfit for feeding infants, this being chiefly the result of careless handling of milk, so that it contains numerous micro-organisms, and also on account of the bad feeding of the cows. As a result condensed milk and various kinds of preserved milks were used, which though useful temporarily were unfit for continuous use as infants' foods. He advocated the establishment of milk-laboratories in our cities on the type of the Walker-Gordon laboratory at Boston, U.S.A., where the greatest care was taken at the farm attached to the laboratory in the foddering and sanitation of cows; and a milk food could be supplied in which the constituents of the food could be varied in percentage composition according to a prescription of the medical attendant to suit the digestive powers of the infant.

Dr. COLLEY MARCH mentioned the following unusual case of Sudden Death in Aortic Aneurysm. On Nov. 11th, 1895, a man aged fifty years, subject to attacks of slight vertigo, was seized with giddiness while crossing a plank and fell a distance of fifteen feet. He was removed to the Rochdale Infirmary in a semi-conscious condition and put to bed. No injury was discovered. He went on favourably and was allowed to be raised on a bed-rest, though he was kept in bed. On the morning of Nov. 20th he complained of hoarseness and spoke with difficulty, but his breathing was unaffected. At noon, having ordinary meat diet, he partook of a good dinner, and everything had been removed after the meal, when he exclaimed that he was going to be sick, and the nurse hurried to him with a bowl. He did not vomit, however, but suddenly his head dropped and his neck became swollen. The nurse pulled forward his tongue, and the house surgeon, Dr. Davies, who was at hand, examined the fauces without finding any obstruction. The swelling in the neck gradually subsided. No blood escaped from the mouth. The face was livid and the man was dead. At the necropsy a lump the size of a small orange was found in the mediastinum, almost surrounding the trachea. On pressure the tumour collapsed and blood escaped. The heart and pericardium were healthy. The transverse portion of the arch of the aorta was atheromatous and ruptured. From the aperture blood had escaped into the cellular tissue and in this confined situation had extended up into the neck and down to the roots of the lungs. Intense pressure must have been exerted on both vagi, and this was the cause of death. The man did not die from hæmorrhage or from obstructed air passages—in fact, he was self-garrotted.

Dr. REYNOLDS showed a man aged fifty-five years who had had a somewhat sudden attack of Paralysis of the Left Leg about seven years ago. His condition for the last five years had been as follows:—On the left side there was wasting of muscles supplied by the third, fourth, and fifth cervical roots, and all muscles supplied by the spinal nerves below that level were in a state of marked spastic paralysis, with increased knee-jerk and ankle clonus. There was loss of sensation for pain in the distribution of the same cervical nerves, but below this there were no sensory changes, the skin being glossy, the nails coarse, the subcutaneous connective tissue thickened, and the circulation very feeble. On the right side there were no muscular changes of any kind, but in the whole sensory distribution below the seventh cervical root downwards and limited by the middle line back and front, including the right leg, there was total loss of pain sensation and of temperature sensation, especially of heat, but the touch sensation was normal. There was no affection of the face or pupils and the muscular sense was normal on both sides. There was no evidence of leprosy and the patient had never been abroad. There was a scar on the penis, but it was doubtful whether it was due to a soft or a hard chancre; there was no history of secondary syphilis, and there had never been any whitlows. From the sudden onset it seemed to have been a unilateral hæmorrhage into the cervical cord, but the peculiar sensory

disturbances resembled more closely those found in syringomyelia.

Dr. THOMAS HARRIS showed a series of cases of Myxœdema, some of which had been under continuous and regular treatment, others in which the treatment by the thyroid extract had been irregular and intermittent. The cases where the treatment had been continuous had lost all the characteristic features of myxœdema and could no longer be recognised as instances of that disease. Other cases where the treatment had only been irregularly carried out still presented characteristic features of myxœdema. One case was treated continuously by thyroid extract from May, 1894, to July, 1895. The patient was at the end of that time apparently in perfect health. In order to see whether the individual could then do without the thyroid preparation the remedy was stopped, but in the course of two months all the symptoms reappeared and the case became a typical one of myxœdema again. The extract was again commenced at the beginning of October, 1895, and at the present time the patient appeared to be perfectly well. Dr. Harris thought it probable that the majority of cases of myxœdema required to take a certain quantity of thyroid extract regularly and continuously for many years, and possibly for their whole life. If the treatment was stopped the majority of cases certainly relapsed. Two of the cases occurred in the same family, a brother and sister being both affected. In the case of the man, immediately after he was put on thyroid extract a typical attack of gout developed which subsided when the extract was stopped and reappeared when the extract was again administered. The last previous attack of gout had been three years before. Dr. Harris thought that the thyroid extract by producing increased metabolism might account for the attack of gout, despite the fact that usually in myxœdema the amount of urea excretion is largely increased by the use of thyroid preparations. It seemed not improbable that if anything interfered with the excretion of nitrogenous products an attack of gout, especially in gouty subjects, might ensue. Dr. Harris called attention to the well-known fact that usually myxœdema patients taking thyroid preparations complained of a good deal of pain in the back or limbs, and that it was worthy of consideration as to whether those pains might not be of a gouty nature.

LIVERPOOL MEDICAL INSTITUTION.

The Normal and Pathological Anatomy of the Thyroid Gland.—Exhibition of Specimens.

THE third meeting of the Pathological Section of this society was held on Feb. 6th, Mr. F. T. PAUL being in the chair.

Dr. ABRAM read a paper entitled a Contribution to the Normal and Pathological Anatomy of the Thyroid Gland. After a brief sketch of the development of the thyroid gland and its bearing upon the position of accessory thyroid structures, the relation of the parathyroid and pituitary bodies to the functions of the thyroid gland was dealt with. Specimens were shown of a Pituitary Body from a case of Cancer of the Thyroid Gland, in which the cells had apparently been exceptionally active. The changes in the thyroid gland in tuberculosis, septicæmia, and exophthalmic goitre were then described. The paper was illustrated by specimens and lantern slides, and Dr. Abram expressed his indebtedness to Professor Boyce for the photographs of his specimens and also to Mr. Walter Edmunds of St. Thomas's Hospital for the loan of several slides and lantern slides illustrating the subject.

Mr. C. G. LEE exhibited three specimens: 1. Section of an Eyeball removed from a woman aged fifty-eight years. The greater part of the globe was occupied by a new growth, apparently a sarcoma. The growth had not penetrated the sclerotic. Three months after the operation the patient was in her usual good health. 2. Section of an Eyeball affected with Chronic Glaucoma, in which a large bulging of the sclerotic had occurred behind the ciliary region. The unusual position of the staphyloma was commented on, the cause suggested being long-continued intraocular tension. 3. Portion of a Tumour and a Microscopic Section thereof from the Orbit of a man aged forty-two years. Complete removal of the growth was found impossible, as it had extended into the nose and the antrum of Highmore. Some discussion took place as to the nature of the growth—carcinoma *v.* sarcoma.

Mr. BANKS showed a Meckel's Diverticulum which he had removed from the sac of a hernia; the small bowel was also present. He believed it to be a unique specimen. He also exhibited a Cystic Myxoma of the Breast, and drew attention to the danger of giving such a tumour the old name of serocystic sarcoma, inasmuch as the tumour is essentially innocent.

Mr. NEWBOLT showed a Uric Acid Calculus removed by a suprapubic operation from a boy aged eleven years. The bladder was closed, but the skin incision left open. Healing took place in three weeks. Also a Lower Jaw removed from a man aged thirty-three years, who fell downstairs and died from the injuries received. The specimen showed a comminuted fracture at the symphysis and fractures of both coronoid and condyloid processes.

Dr. BUCHANAN showed a beautiful Series of Blood Preparations and Drawings of the same from a series of cases of Spleno-myelogenous and Lymphatic Leukæmia.

Dr. WIGLESWORTH showed the Intestines from cases of Swine Fever.

Mr. PAUL then exhibited a series of specimens, sections, and lantern slides of Tumours of the Thyroid Gland. He said that the enlargements of the thyroid gland that he had met with might be arranged in the following groups: (1) congenital cysts; (2) malignant growths; (3) adenomata; and (4) hypertrophies. Carcinoma was much more common than sarcoma and was usually of the type of thyroid gland tissue. The adenomata he had excised, eight in number, were four of them cystic, two gelatinous, one fibrous, and one purely glandular. He had removed half the gland in one case of hypertrophic goitre and in two cases of exophthalmic goitre; the gland follicles in one of the latter, unlike Dr. Abram's cases, contained a quantity of colloid matter, though the symptoms were of the most severe type. All the cases operated upon (twelve) recovered rapidly.

Professor BOYCE showed lantern slides of a Thyroid Tumour, which consisted of masses of colloid material without any glandular structure.

Professor SHERRINGTON, Dr. BARENDT, Mr. BANKS, Dr. CHALMERS, Mr. LARKIN, and Mr. HAMILTON took part in the discussion on the specimens and papers.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

Sectional Anatomy applied to Pelvic Hæmatocele.—Exhibition of Cases and Specimens.

A MEETING of this society was held on Dec. 19th, 1895, Dr. PORTER, President, being in the chair.

Dr. ANDREW WALKER read a paper entitled "Sectional Anatomy applied to Pelvic Hæmatocele; some Practical Considerations."—The PRESIDENT, Dr. ARTHUR HALL, Mr. MAKEIG JONES, and Dr. KEELING discussed the cases and paper.

The following cases and specimens were shown:—Cavernous Angeioma, by Dr. RUTHERFORD: Congenital circumscribed Xeroderma and Myxœdema, by Dr. BURGESS; Pyæmic Abscess of Lower Aortic Aneurysm which had opened into the Trachea, and Microscopic Slides, by Dr. PREST HUGHES; and specimen of Cancer of Rectum removed by Operation, by Mr. PYE-SMITH.

At a meeting on Jan. 16th, 1896, Dr. KEELING showed a Dermoid Ovarian Cyst removed by operation from a young woman aged twenty at the Jessop Hospital. The right ovary was diseased and removed at the same time; on section it showed commencing dermoid change.—Mr. SANDHAM SYMES showed a Urethral Calculus which he had removed by operation from a man of fifty years of age who had sustained an injury which lacerated his urethra four years previously.—Mr. SNELL introduced a middle-aged man with extreme Myosis and Argyll-Robertson pupil on one side and ophthalmoplegia interna on the other. There was an absence of knee-jerks and there were other symptoms suggestive of locomotor ataxy.—Mr. FLETCHER gave particulars of a case of Obstruction of the Left Bronchus by a Foreign Body which proved to be a fragment of meat bone. The patient, a man aged fifty, was seized with intense dyspnœa whilst at dinner. On examination the left bronchus was made out to be completely obstructed, no air entering the lung. Seven days later the piece of bone was coughed up.

At a meeting on Jan. 30th Dr. PORTER showed a case of Raynaud's Disease. Symmetrical gangrene had been

threatened in both hands and feet. The feet, however, had recovered and only the tips of some three fingers on each hand had seemed likely to be lost. There was no history of crises or hæmoglobinuria.—Dr. ARTHUR HALL showed a case of Xanthoma and Mr. E. BARBER a case of Outgrowing Tenth Costal Cartilage.—Dr. ALFRED ROBINSON communicated short notes of a Fatal Case of Chorea Gravidarum.—Dr. HARVEY LITTLEJOHN read a paper on Six Years' Notification of Infectious Disease in Sheffield.—The PRESIDENT, Mr. SNELL, Mr. RICHARD FAVELL, Dr. BURGESS, Dr. MARTIN, Mr. EDWARD BARBER, Dr. SAMSON MATHEWS, Dr. STOKES, Mr. HARVEY, Mr. WEST JONES, and Dr. BURMAN made remarks.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.

On the Diagnosis of Early Phthisis.—Melanotic Sarcoma of the Eyeball.—Demonstration of Microscopical Specimens.

A MEETING of this society was held on Feb. 4th, Dr. A. BRONNER, President, being in the chair.

Dr. CAMPBELL read a paper on the Diagnosis of Early Phthisis. The difficulties in the absence of definite physical signs were enumerated as follows:—(1) Dyspepsia, said to be present in 33 per cent. of tuberculous cases; (2) vomiting is generally a later symptom; (3) anæmia; (4) wasting; (5) night-sweats; (6) laryngitis; (7) cough, not always an early symptom; (8) hæmoptysis, present in 50 per cent. of the cases; (9) pleurisy; and (10) temperature up in the evening. With regard to physical signs the importance of examining the supra-spinous fossæ was pointed out. Bacilli were not always present in the sputum. The latency of phthisis was discussed; cases were cited of lupus being latent for thirty years and phthisis for forty years. The great importance of an early diagnosis was insisted on. As regards treatment, much was expected from the use of anti-tuberculous serum.—The paper was discussed by Dr. MAJOR, Dr. BELL, Dr. GOYDER, Dr. EVANS, Dr. HONEYBURNE, Mr. MERCER, Mr. HEBBLETHWAITE, Dr. MITCHELL, Dr. MANKNELL, and Dr. A. BRONNER.—Dr. CAMPBELL replied.

Dr. S. LODGE read notes of a case of Melanotic Sarcoma of the Eyeball (third stage) removed eighteen months ago without recurrence, and showed a microscopical specimen of the same. The patient was aged seventy-three years and for two and a half years had a growth in the left eye. Eighteen months ago enucleation was performed, and up to the present time there were no signs of recurrence.—Dr. EVANS and Dr. GOYDER spoke on the case.—Dr. A. BRONNER pointed out the importance of regarding detachment of the retina with suspicion; if, in addition, there was much pain growth should be looked for.—Dr. LODGE replied.

Dr. CRAWFORD gave a demonstration of Microscopical Specimens.

PLYMOUTH MEDICAL SOCIETY.

Exhibition of Cases and Specimens.—The Case of Mr. R. B. Anderson.

A CLINICAL MEETING of this society was held on Feb. 8th, Dr. HINGSTON, President, being in the chair.

Mr. LUCY demonstrated the Results of the Radical Treatment of Inguinal Hernia after the relief of strangulation in a man aged sixty-six years operated on two years ago by Mitchell Banks's method.—Mr. LUCY also showed a man aged forty-five years, whose pile-bearing area was excised after Whitehead's method six months ago with excellent results.

Dr. HAMILTON exhibited for Mr. WHIPPLE a young man with Primary Sore and Secondary Rash now under treatment by increasing doses of antisyphilitic serum. The same member also showed a specimen of many Calcareous Particles coughed up by a man aged twenty-five years with phthisical signs in both lungs.

Mr. ALDOUS exhibited: 1. Subperiosteal Sarcoma springing from the back of the lower end of the right femur, infiltrating tissues in the popliteal space and commencing to attack the bone. The tumour was represented by a hæmorrhagic diffluent mass; it had been growing rapidly for the past four months in a woman aged forty-eight years. Amputation by equal antero-posterior skin flaps was performed through the upper third of the thigh. 2. The Ovaries removed by Mr. Whipple from an unmarried woman aged twenty-nine years; the right ovary was enlarged and cystic, the left was cystic, but not so large as the right. Severe pain after every action of the bowels was complained of, and per rectum a rounded, very painful mass the size of an orange could be felt in Douglas's pouch. 3. Fracture running through the Body of the Sphenoid Bone, lacerating the anterior cerebral arteries, with hæmorrhage into the frontal lobes. The patient, a man aged fifty-five years, of alcoholic habits, but stated to have been sober for two or three days, fell down eight steps at 11 P.M., got up, said he "felt all right," went to bed and became unconscious, but was treated by the friends as drunk and incapable. He was seen on the evening of the third day, when he was found to be partly comatose; he could be roused, and recognised Mr. Aldous. He drank eagerly, &c., and there was no paralysis, but he lapsed into coma with incontinence of fæces and urine, and died on the sixth day.

Dr. WEBBER showed a Heart removed from a man aged fifty-four years who died from angina pectoris. The organ weighed fourteen ounces; the surface of the right ventricle was loaded with fat and the myocardium was fatty; the ventricles were distended with ante-mortem clot; and the mitral valve contained one or two atheromatous nodules, but was competent. The aortic valves were incompetent, being puckered, contracted, and atheromatous; each sinus of Valsalva was hard, roughened, and calcareous. Of the coronary arteries the right was calcified for over an inch from its origin, and the left just at its commencement.—Dr. WEBBER also showed slides of Scirrhous and Encephaloid Carcinoma of the Stomach and a Pigmented Mole.

The case of Mr. R. B. Anderson was brought up, and after some discussion it was decided to memorialise the Members of Parliament for Plymouth and Devonport. Sympathy with Mr. Anderson, who formerly held the post of house surgeon to the South Devon and East Cornwall Hospital with marked ability, was expressed by the members present.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

Exhibition of Cases and Specimens.—Calcareous Degeneration of the Heart and Arteries.—The Weather, Influenza, and Disease.

THE fifth meeting of this society was held on Feb. 5th, Dr. ARGYLL ROBERTSON, President, being in the chair.

Mr. COTTERILL showed a case of Leucoplacia of the Tongue and a specimen of Epithelioma of the Tongue.

Dr. DAWSON TURNER showed a series of photographs taken by the Roentgen process. The photographs exhibited were of the hand, the foot, purse and coins, razor in case, the wrist, &c. An interesting point was brought out with relation to the wrist. The radius and ulna were distinct, but the cuneiform bone was absent, its place being a blank. He pointed out that the movements of the cuneiform bone were not fully understood, and it was possible that during pronation, when the photograph was taken, the cuneiform passed behind one of the other bones, hence the blank.

Dr. BYROM BRAMWELL read a paper on a case of Calcareous Degeneration of the Heart and Arteries with rapidly-developed Subcutaneous Tumours in the axillæ, elbows, groins, of the nates, and popliteal spaces, with symptoms suggestive of Addison's disease in a young man aged twenty-five affected with advanced cirrhosis of the left kidney, the right kidney having been completely destroyed fourteen years before by pyelo-nephritis. When first seen by Dr. Bramwell the patient complained of extreme debility and symmetrical swellings in the axillæ, bends of the elbows, groins, nates, and popliteal spaces. He had the history of a severe illness fourteen years previously. Eighteen months previously he had undergone severe hardships in America, and had broken down in health. From this he never recovered completely. After returning to Scotland, while engaged in work he strained his back, and was confined to bed, with pains in the back, joints, and muscles. When seen by Dr. Menzies he had swellings in the axillæ, bends of the elbows, groins, and popliteal spaces. The swellings were hard and brawny. He made no improvement under treatment, the debility and anæmia increasing and albuminuria developing. When seen by Dr. Bramwell he was in bed. Emaciation was advanced and there was profound anæmia. The skin of the abdomen was dark, the areola of the nipples was dark, but there were no

pigmented patches on the buccal mucous membrane. The radial and brachial vessels were rigid and thickened. The heart was very feeble, the sounds being almost inaudible. There was a soft systolic murmur at the base. The red corpuscles numbered 2,700,000 per cubic millimetre. The white were slightly increased in number. There was no alteration in the shape of the corpuscles. The urine was loaded with phosphates and contained some albumin. Hard brawny swellings were present in the axillæ, bends of the elbows, groins, folds of the nates, and popliteal spaces. The swellings were dense and firm, like calcareous matter or bone. The skin over the swellings was of dark purple colour, such as seen in purpura, and highly suggestive of sarcoma. The asthenia rapidly increased. The skin became darker, the swellings increased in size, and the temperature began to rise. The heart became very rapid. Both the radial arteries became absolutely rigid and pulseless, and could be traced up to the elbows as rigid cords. The brachial arteries showed feeble pulsation, pericardial friction developed, and the patient died. At the necropsy the infiltrated areas were found to be not so purple-coloured as during life. To the naked eye they seemed to be densely fibroid and cut with a gritty feeling due to calcification. The arteries were extremely calcareous with the exception of part of the aorta, carotids, and vessels of the brain, which were healthy. The peripheral nerves were healthy. The pericardium showed recent lymph. The heart was enlarged, the enlargement being principally of the left ventricle. The papillary muscles and columnæ carneæ showed great calcareous encrustation. The right kidney was represented by a small mass of fibrous tissue. There was no pelvis. The left kidney was in an advanced condition of cirrhosis. The brain was anæmic; the thyroid gland was normal.—Dr. GULLAND made a microscopic examination of the different organs. In the spleen there was an unusual quantity of golden-brown pigment. In the heart the muscular wall showed calcification of the individual cells. The degeneration of the muscle cells had begun in the cell body. Many of the arteries were so calcified as to be converted into rigid tubes. The kidney showed alteration of the vessels, parenchyma, and secreting cells. The middle coat of the vessels was calcified and the intima at parts replaced by delicate connective tissue. The glomeruli were swollen and congested. All showed inflammatory changes, some being mere bundles of fibrous tissue. The secreting tubes were in a state of catarrh. The skin showed fibrous hyperplasia with marked calcification. The most striking points in the case were: (1) The calcareous degeneration of the heart, the interstitial tissue and muscle fibres being calcified; (2) the occurrence of the symmetrical swellings due to fibrous hyperplasia with calcification; (3) the condition of the arteries, almost unique as regards the calcification at the time of life of the patient; and (4) the condition of the kidney. The right had been entirely destroyed and the left was in an advanced state of degeneration. The absence of kidney symptoms was extraordinary. During childhood the right kidney must have been destroyed. The calcareous matter circulating in the blood and not being excreted by the degenerated kidneys had become deposited in the organs and subcutaneous tissues. The condition must have come on rapidly, the swellings having appeared first within six weeks of death.—Dr. RUSSELL said he had listened with great pleasure to the account of this unique case. The occurrence of calcareous degeneration with kidney cirrhosis in the aged was frequent, but in the earlier stages of life it was very rare. He (Dr. Russell) had recently seen a man of thirty-three years with an aneurysm of the abdominal aorta and thickened and atheromatous arteries, who had been operated on some time ago for aneurysm of the popliteal artery. He also dwelt upon the interesting and unique character of the tumour-like growths.—Dr. P. A. YOUNG thought the condition might be similar to that seen in myositis ossificans which he had seen in early childhood.—Dr. FOWLER and Dr. ARMOUR spoke.—Dr. BRAMWELL replied.

Dr. A. LOCKHART GILLESPIE gave an abstract of a paper on the Weather, Influenza, and Disease. He had drawn up statistics of the admissions to the Royal Infirmary during the last ten years. He had first investigated the admissions of different diseases as affected by the weather. During three years when cyclonic weather was most marked respiratory cases were admitted in larger numbers. Pneumonia was an exception to the law holding in other respiratory disease, for the largest number of pneumonias was admitted in anticyclonic periods. Cardiac and kidney diseases were most numerous in cyclonic weather; gastro-intestinal cases in anticyclonic. Numerous tables and diagrams were shown illustrating the influence of the weather on admissions to the infirmary. Before each epidemic of influenza there was a period of cyclonic weather. The epidemic began in anticyclonic weather. Before the epidemic rainfall was above the normal, during the epidemic below the normal. The epidemic thus commenced after wet weather, began during dry weather, and ended with wet weather.

Reviews and Notices of Books.

The Vaccination Question. By ARTHUR WOLLASTON HUTTON, M.A., formerly Scholar of Exeter College, Oxford; Librarian of the National Liberal Club, London: Methuen and Co. 1895. Price 2*s.* 6*d.*

IT is not unsatisfactory to critical readers that Mr. Hutton has reprinted the letter addressed by him in 1894 to Mr. Asquith, at that time Home Secretary, because it is now accompanied by notes and corrections of a few errors which, although they did not in the least affect the general arguments, are, nevertheless, undesirable in a controversial essay. Along with this letter there is now published one addressed in October, 1895, to Mr. A. J. Balfour, First Lord of the Treasury, but its only material contribution to the subject of debate is an abstract of a paper by Dr. Adolf Vogt of Berne on the results of the discontinuance of compulsory vaccination in twelve Cantons of Switzerland. Compulsion, however, still exists in ten Swiss cantons. It is generally known that Mr. Hutton is one of the most resourceful and uncompromising opponents of vaccination and a strenuous advocate of the total and immediate repeal of the compulsory laws. Granted the efficacy of vaccination as a prophylactic against small-pox, compulsory legislation is not an inevitable corollary. It seems, however, that in practice the two questions are difficult to keep separate, and the opponents of compulsion are well aware that clamorous denunciation of vaccination as useless and dangerous is the easiest means of furthering the object which they have at heart. The author accordingly finds vaccination to be an unmitigated evil; in the few cases where its supporters seem to have some show of reason on their side he ascribes the alleged good results to improved sanitation, to a previous attack of small-pox, or to constitutional immunity, and so forth. On statistics which show a higher mortality from small-pox among unvaccinated than among vaccinated patients he is especially severe, these figures being "cooked and marshalled" (p. 58), "alive with prepossession" (p. 59), and "prepared by enthusiastic advocates, without any critical check, unsatisfactory evidence in any case" (p. 77). On the other hand, it may be urged that the statistical method favoured by the author is not unexceptionable, and that his implied division of the population into vaccinated and unvaccinated is for practical purposes no more reasonable and satisfactory than a hard-and-fast division into educated and uneducated would be, this analogy being helped out by the circumstance that some adults appear to retain no more of the protective effect of their vaccination in childhood than an ordinary labourer retains of the literary accomplishments of his board-school days. The mere assertion that a given individual or a given proportion of the population is vaccinated has but slight clinical or statistical value in the absence of precise evidence as to the quality of the vaccination and the time which has elapsed since it was performed. That a solitary vaccination in infancy does not confer life-long protection from small-pox has been well known and recognised for very many years, and it is a mere dialectical artifice to engage in an elaborate confutation of the opinions to the contrary effect entertained in the end of last century,

when systematic vaccination was a novelty and the data showing its limitations were necessarily unprocurable. The protective effect of primary vaccination diminishes as the individual becomes older, and this is what provides Mr. Hutton and his fellow-workers with a statistical basis for their contention that small-pox attacks the vaccinated and the unvaccinated alike, and that populations containing 96 per cent. of "protected" individuals are nevertheless liable to outbreaks of the disease. Successful primary vaccination records itself very distinctly in the situation where it has been performed; if not thoroughly successful it is little more than useless, and not much better than the "vaccination" with pure glycerine which Mr. Hutton mentions without disapproval on page 39. It is obvious that any serious and unprejudiced inquiry into the nature of the relations between vaccination and small-pox must take account of the number, quality, and age of the cicatrices visible on the arms of small-pox patients, and the proportion of severe attacks and deaths in the several sub-divisions according to which the cicatrices may be classified. The study of small-pox following successful revaccination will not give much trouble, for experience shows it to be of rare occurrence. It should be carefully borne in mind that vaccination may fail to be protective either because its effect is impaired by lapse of years or, on the other hand, because it is too recent. Cases of concurrent variola and vaccinia are a well-known consequence of vaccinating all the occupants of a house where small-pox has shown itself, the explanation being that these patients received the small-pox infection before the vaccination took effect. Protection does not commence until the vaccine vesicle and areola are formed, and if the infection of small-pox has entered the system during the preceding thirteen or fourteen days—the period of its incubation—the two diseases will be developed simultaneously. Mr. Hutton has handled his arguments very dexterously and made the most of them, but they are not likely to convince practitioners who have much clinical experience of small-pox among vaccinated populations. His book will, however, no doubt be read by unthinking persons, who will imagine that his rhetorical fulness and fluency guarantee his knowledge of the subject and entitle him to pose as an authority. The writer of the present notice has never had small-pox, but has in the course of years encountered a great many cases of it; he ascribes this exemption neither to vaccination in childhood nor to "constitutional immunity," as Mr. Hutton suggests, but to two revaccinations, each attended by formation of vesicle, areola, and crust—one performed by the late Dr. Marson of the Highgate Small-pox Hospital in 1871 direct from an infant's arm, and the other in 1884 with fresh matter from a calf in the Lamb's Conduit-street Station.

A Manual of the Practice of Medicine. By GEORGE ROE LOCKWOOD, M.D. Philadelphia: W. B. Saunders. 1896. Price $2½.

OF the making of new text-books of medicine there is necessarily no end, on the other side of the Atlantic as on this. The present volume is one of the "New Aid Series" issued by W. B. Saunders of Philadelphia and is presumably intended mainly for the use of students. It has many good points. It is clearly printed and the misprints are few, though we would call the publisher's attention to a startling one on page 756, where "hemorrhage" has been printed though "hemiplegia" is clearly meant. In the general arrangement of the book Osler's classification of diseases has been followed: the old practice of a general introductory chapter is discarded, and the reader is confronted on the opening page with the definition and synonyms of typhoid fever. This extreme abruptness of onset, found in many modern text-books in which conciseness is an aim, does not appear to us to be of real advantage. The old voluminous introductory disquisition may have been a mistake, but surely the student needs some general acquaintance with the pathology and treatment of pyrexia itself and with the nature of contagion—subjects which might well have formed a short introductory chapter to the section on fevers. Similarly, a short general introduction to nervous diseases discussing such symptoms as coma, convulsions, and aphasia would be of the greatest value to the student, and its omission constitutes a distinct defect in the book; coma and aphasia, indeed, do not even appear in the index. The general matter is, however, good, clear, and up to date; some of the sections, such as that on hypertrophy and dilatation of the heart, are particularly lucid and well arranged, and some of the tabular statements—that, for instance, dealing with the conditions under which symptomatic purpura occurs—will be useful to the student. The chapters on nervous diseases are the least satisfactory, the space accorded to such an important disease as general paralysis of the insane being singularly inadequate. The pathological changes in the spinal cord in locomotor ataxia are not very well described, and no idea is given of their vertical distribution. It is very misleading to state in the table of differential symptoms between cerebral hæmorrhage and embolism that the former usually occurs from the right middle cerebral artery and the latter in the left; the slight differences which exist are of little or no value in diagnosis. A good feature in the book consists in the introduction of coloured temperature charts, with which the pulse- and respiration-chart is often combined. There are, further, one or two excellent coloured plates, notably one of the blood in leukæmia. Regarding the book as a whole, it is one which may be read with advantage as a change from those with which we are familiar, but it is scarcely of such merit as to displace our own standard works.

LIBRARY TABLE.

The Student's Guide to Practical Therapeutics. By ALEXANDER WHEELER, L.R.C.P. Edin., L.R.C.S. Edin., L.F.P.S. Glasg. Edinburgh: William Bryce. 1895.—The author of this work ought in justice to himself to have drawn the reader's attention more plainly to the limitations inseparable from his brief sketch of an extensive subject. Within the space of 145 small pages, being Section I. of the book, he describes the treatment of a number of diseases, including rarities like Hodgkin's disease, myxœdema, acromegalia, Addison's disease, and Grave's disease (*sic*); but there is no reference to many far more common morbid states, such, for instance, as erysipelas, or to any form of skin disease. There are several typographical errors such as Grave's disease (four times at least), and the following at p. 176: "Broadly speaking, opium morphine and its principal alkaloid are stimulants, narcotics," &c. In Section III., entitled "A Synopsis of Drugs in Daily Use," there are some useful practical hints.

The Guide to South Africa. Edited annually by A. SAMLER BROWN and G. GORDON BROWN for the Castle Mail Packets Company. London: Sampson Low, Marston and Co., Ltd. 1895. Price 2*s.* 6*d.*—Everything relating to South Africa is of absorbing interest at the present time, and in this well-arranged volume of 350 closely printed pages general readers will find a wealth of varied information on almost every aspect of that country. It is written with a special view to the requirements of tourists, sportsmen, invalids, and settlers, and has special sections on each of the South African States, with chapters on Climate, Health, Mining, Sport, &c. Twenty-three short chapters are devoted to journeys between various important centres, and there are twelve coloured maps.

Mention has already[1] been made in these columns of the excellent atlas of South Africa published for the Castle Line Steamship Company.

Guide Pratique d'Hygiène et de Médecine Coloniale à l'usage des Postes Militaires dépourvus de Médecin. (Practical Guide of Hygiene and Colonial Medicine for the Use of Military Posts destitute of Medical Men.) Par le Dr. SADOUL, Médecin de Première Classe de la Marine. Paris: Augustin Challamel, Éditeur Librairie Maritime et Coloniale, 17, Rue Jacob. 1895.—This appears to us to be a trustworthy and useful book of its kind, well-arranged and easily referred to. Perhaps the best chapters are those on the Choice and Preparation of Drinking Water, where the uses and dangers of filters are judiciously estimated, on the Treatment of Diarrhœa and Dysentery, and on Fractures and Injuries. The dose of quinine in fever, we notice, is given as one or two grains, and in extreme cases three grains, the author preferring hypodermic administration in half these quantities. The book will fulfil its purpose if it survive long enough the voyage to the tropics, for its characteristic paper binding is adapted to anything rather than the rough usage of a Colonial outpost.

The Tombs of the Popes: Landmarks in the History of the Papacy. By FERDINAND GREGOROVIUS. Translated from the German by Mrs. L. W. TERRY. Rome, 1895.—This is a classic in its original German and also in the authorised versions of it in French and Italian. Only now, however, is it made accessible to the English reader. Mrs. Terry has performed the translator's task so well as to remove the reproach of its having been so long left unattempted. Her work is so finished in itself that it conveys the impression of something "well worth waiting for." No better guide to the great epoch-making events in papal history could be offered to the student on his first visit to Italy; but further and deeper familiarity with the subject suggests aspects of it in which more extended information would be welcome. Probably no men were ever so faithfully and so skilfully served by their physicians as the long line of the Popes, and the author might have supplemented his work by some notice of the more prominent of these able and circumspect consultants. Indeed, "The Papal Medical Advisers" might form the theme of an independent work not less instructive than interesting. Not a few of these functionaries participated effectively in the policy of their august patients; while many of them were distinguished in their day for scientific as well as clinical proficiency. Such, for example, were Lancisi, early in last century, and Viale Prelà and Ceccarelli in the middle and later decades of the nineteenth.

Introduction to the Study of Fungi. By M. C. COOKE, M.A., LL.D., F.L.S. London: Adam and Charles Black. 1895. 14*s*.—Those engaged in the study of fungi will welcome this new work by Mr. Cooke, who is already the author of many other books on the same subject. This volume is especially intended for the use of collectors, and it is clearly written and pleasant to read. It consists of three principal divisions, which deal with organography, classification, and distribution respectively, the last division being necessarily the shortest on account of the lack of knowledge which still exists in connexion with that subject. Very full bibliographical lists are placed after the principal chapters, which will be invaluable as references to those who wish to pursue their study further. There is at the end a short appendix on methods of collecting, in which many useful hints are given for practical work which will materially help those who are beginning the subject. The book is very well got up and contains several good illustrations, and there is also a glossary of terms.

[1] THE LANCET, Feb. 16th, 1895, p. 416.

New Inventions.

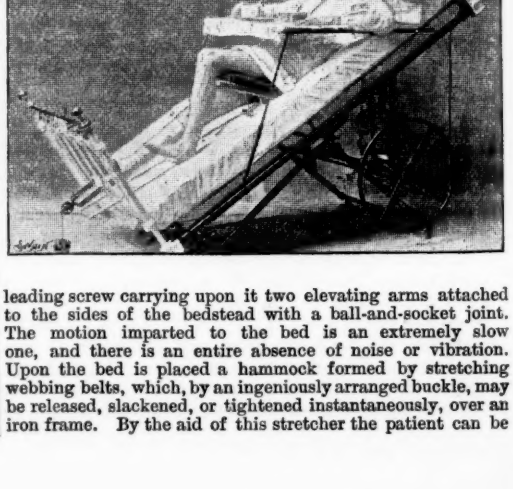
THE GORHAM BED.

THE ordinary form of bed on which the healthy take their rest and repose is at the best but ill adapted for use by the sick, and various have been the attempts made to modify it for use in the sick chamber and the hospital ward. The latest invention in this direction is the Gorham bed, and it is one of the best we have yet seen, for it not only affords comfort to the bedridden but makes the work

FIG. 1.

of both medical man and nurse easier. This new form of bed has the appearance of, and is, in fact, an ordinary French bedstead; but instead of being supported by a leg at each corner it rests upon a Λ-shaped trestle, to which it is jointed, and is capable of being elevated or depressed at either end. This is accomplished by turning the wheel shown in the illustration (Fig. 1), the axis of which is a

FIG. 2.



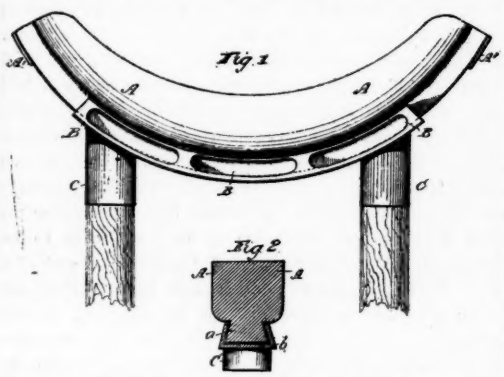
leading screw carrying upon it two elevating arms attached to the sides of the bedstead with a ball-and-socket joint. The motion imparted to the bed is an extremely slow one, and there is an entire absence of noise or vibration. Upon the bed is placed a hammock formed by stretching webbing belts, which, by an ingeniously arranged buckle, may be released, slackened, or tightened instantaneously, over an iron frame. By the aid of this stretcher the patient can be

lifted free of the bed, and the clothing changed and the mattress aired with little or no disturbance of the patient. Examination may be readily made and dressings easily applied. A seat- and foot-rest, readily attached to, or detached from, the bed, enables the patient, even if compelled to lie in the supine position, to practically sit up at table for eating, writing, or reading, and to recline at any angle on an inclined couch. A patient who is able to flex even one leg only can sit in a normal position. All these changes of position are procured mechanically without any muscular effort by the patient, and the mechanism is so simple that it may be worked by a child. All parts of the bed are of iron or steel. As a preventive of bedsores the Gorham bed presents distinct advantages. As shown in Fig. 2, a patient suffering from a fracture may sit, stand on the well foot, recline at any angle, and be raised on the hammock without changing the tension on the extension weight, and, as the illustration also shows, such a patient may dine at table. In cases where a patient is entirely helpless the invention will prove of great use, and the ease with which the bed can be tilted makes it a useful adjunct to obstetrical practice and abdominal surgery. If desired the bed can be used as an operating table. There are one or two obvious improvements which can easily be made. The wheel with its handle in a children's ward especially would be likely to prove a source of danger, and should be replaced by a crank-handle. The head of the bed, too, might be made to fold back so as not to project over the head of the patient when the bed is tilted forward. With these improvements the Gorham bed should hold an important place among the various mechanical devices invented for the comfort and well-being of the sick. The invention is sold complete for £15, £9, and £5, according to finish. It is also intended to let the bed out on hire at from 30*s.* to 40*s.* a month.

The Gorham Invalid Bed Company, 14A, Finsbury-square, E.C., are the manufacturers.

IMPROVEMENTS IN CRUTCHES.

THIS invention of Mr. George B. Main of Glasgow relates to improvements in crutches, the object being to remove from under the arm the friction at present existing and caused by the backward and forward movement of the crutch when in use. Hitherto the head or crosspiece of crutches has been made in one piece—that is to say, without separate movement or mechanism—so that when the crutch is moved backward or forward, as in actual use, friction takes place under the arm between the head or cushion of the crutch on the one part and the arm on the other part, and so long as the crutch is being used this friction exists. In carrying out his invention Mr. Main has caused the point of frictional contact to be removed from the body or arm by making the head or crosspiece of the crutch in two parts, one part being stationary and the other part



slidable on the stationary part, which allows the cushion or arm rest to remain stationary during the forward and backward movement of the crutch, and thereby transfers the friction from between the arm and the cushion to the lower point of contact between the two parts of the head or crosspiece. There are different forms of slidable adjustment, but that shown in the illustration he considers simplest and to be preferred. Fig. 1 represents in side elevation a head or crosspiece of a crutch made in accordance with Mr. Main's invention. Fig. 2 is a transverse section of the same; the upper or stationary portion of the head is marked A and the lower or slidable portion B. The lower edge of the said stationary piece A forms a sector of a circle, and in cross section (reference being had to Fig. 2) constitutes a dovetail projection A. This dovetail projection A, works in the dovetail recess C of the lower slidable portion B of the crutch, which is also made a sector of a circle and concentric with that of the upper portion A. Stops A' are formed to limit the movement of the slidable portion B. The slidable portion B is provided with two sockets, C, for connecting the head or crosspiece of the crutch.

SCOTTISH POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE newly-formed Scottish Poor-law Medical Officers' Association held its inaugural dinner in Glasgow on Jan. 31st, when the chair was occupied by Dr. Bruce of Dingwall, the direct representative of Scotland in the General Medical Council. He was supported by an honorary President of the Association, Mr. Alexander Cross, M.P. for Camlachie (Glasgow), as also by prominent members and officials of the various local parish councils, while a large number of medical officers from various parts of the country were present, as well as members of the medical staffs of the Barony, City, and Govan parishes in Glasgow. The Chairman, in the course of the evening, spoke of the work done and the responsibilities incurred by parish medical officers, more especially those working in remote, sparsely populated districts, and advocated the necessity of reform in parochial medical administration. He commented on the fact that suitable house accommodation was invariably provided for the clergyman and schoolmaster of a district, while the medical officer's requirements in that respect were completely ignored. The slender tenure by which the medical officers hold their posts was another point to which attention must be directed and improvement demanded. In districts in which from lack of population one medical man only can be supported, the loss of the parish appointment means the introduction of a new competition and financial loss, which is always far beyond the mere deprivation of the parochial stipend, and may be actual ruin. The fact that this deprivation can be effected in obedience to a temporary popular clamour or to gratify the economical desires of some "guardian of the rates" is a state of matters that ought to be remedied. The parochial medical officer should in fact be recognised as an independent civil servant with a salary suitable to his responsible and arduous duties, and in large parishes he should have a properly qualified assistant. The views advanced by Dr. Bruce were approved by the meeting, and Dr. William L. Muir, the President of the Association, endorsed all that had been said, emphasising the necessity for the medical officer being made independent of the local authorities in order that his responsibilities to the poor of his district might be met without risking the loss of his appointment. Mr. James Brand, chairman of the Barony parish council, responding to the toast of the "Parish Councils of Scotland," took occasion to express his sincere sympathy with the objects of the society, which he said had his approval long before he heard them formulated, and he assured the meeting that he would gladly assist in furthering the objects of the society. Mr. Wallace, inspector of poor (Govan board), spoke in similar terms, especially commending the desire for fixity of tenure, as it enabled a man to do his work unhampered with the fear that the conscientious discharge of his duty might lead to his dismissal.

The Association is to meet once a year; it is open to all having an interest in poor-law work, more especially to present and past holders of parochial medical appointments, and it is managed by an executive to be elected annually. The present office-bearers are Dr. Bruce (Dingwall), Honorary President; Dr. W. L. Muir, President; Dr. David Couper, Vice-President; Dr. Matthew Martin, Treasurer; Dr. Alexander Murdoch (17, Broad-street, Mile End, Glasgow), Secretary; with Dr. Findlay, Dr. Core, Dr. G. R. Fortune, Dr. Cullen, and Dr. Wallace to complete the council.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 15, 1896.

AT the Totnes County Court on Feb. 5th a case was tried which exemplified in a very striking manner the difficulties that present themselves to juries in cases where medical evidence forms a leading feature. A Brixham trawler named CAMPION had the misfortune in May of last year to be crushed between the boom and the capstan of his boat. He received an injury to his shoulder, and on going ashore next day he went at once to Mr. HAYWARD and told him of the accident and of the pain he was suffering. At the surgeon's request he stripped, and after an examination he was assured that there was no dislocation or fracture, and that he must rest his arm and rub in a liniment. Ten days after the injury CAMPION consulted another surgeon, Mr. MAYER, who told him there was a dislocation of the acromial end of the clavicle and inflammation of the bone as a result of this unreduced displacement. He proceeded to treat this inflammation, and on a subsequent visit "set the bone and bandaged up the shoulder." It is unnecessary to follow the case through all the intervening stages. It is enough for our purpose to state that CAMPION, influenced no doubt by Mr. MAYER'S opinion, brought an action against Mr. HAYWARD for "negligence and carelessness." The trial lasted several hours and consisted almost entirely of medical evidence. Mr. MAYER, Mr. SQUARE, Dr. MCBEATH, Mr. KAY, and Mr. VICKERS all agreed that the acromial end of the clavicle was dislocated upwards on to the acromion, that such a dislocation could be easily detected and ought to have been detected when the patient was first seen. They were followed by Mr. HAYWARD, Mr. ELLIOTT, Mr. PICKERING PICK, Mr. PAUL SWAIN, and Mr. LUCY, who were all equally emphatic in their evidence that the clavicle was not dislocated now and had not been dislocated in May last. The judge very naturally referred to this case as presenting difficulties as great as had ever occurred to him in all his experience. The jury, after considerable deliberation, found a verdict in favour of the defendant, and judgment was entered accordingly.

It is impossible not to feel that the public must view such a case as this with the gravest dissatisfaction. The man in the street will say that the collar-bone is one that is easily handled and felt, and that it ought not to be possible to have conflicting evidence on such a simple matter of fact as whether its acromial end is or is not dislocated. So argues the man in the street, and he will probably explain the discrepancy in the evidence by the influence of professional rivalry on the one hand and professional friendship on the other. With such a view of this case we cannot for one moment agree. We do not doubt that the difference of opinion was honest and that it arose from the inherent difficulty of the case. For it must not be lost sight of that these cases are difficult. Although the clavicle is a subcutaneous bone, and its outline is plainly to be felt from end to end, yet its acromial articular facet is very small, and unless great care is taken a mistake is easily made in determining a dislocation. There is normally an elevation at the acromio-clavicular joint, and this is readily mistaken for a displacement of the clavicle. But in the present case all the witnesses seem to have agreed that the acromial end of the bone was enlarged; some looked upon this as the result of the man's laborious occupation, and others attributed it to the injury. But all agreed it was present. This enlargement no doubt simulated a dislocation and must have rendered the diagnosis even more difficult than usual.

But when we have granted that the diagnosis of this particular dislocation is always a little difficult, and that in this special case there was a complication that rendered it more than usually difficult, we are still face to face with the fact that several medical men who saw the case made a serious error of observation. Accurate observation is the most difficult of all arts, and only those attain it who cultivate it constantly and with infinite pains and care. In drawing inferences from facts there is room for difference, but in observation we ought to be able to exclude it. This case reminds us once more that the chief aim of medical education should be to make students accurate observers.

We gladly accept the finding of the jury, and we congratulate Mr. HAYWARD on his success. It is certainly more easy to accept this view than the other; it is easier to believe that competent surgeons may have mistaken the prominence of an enlarged acromial end of the clavicle for a displacement of that bone than that equally competent surgeons should have overlooked a dislocation of such a bone, especially when its enlargement would have rendered the recognition of the dislocation more obvious than usual. In the evidence much stress seems to have been laid upon two points which to us appear to be of quite secondary importance. It was urged that a dislocation could not have been caused by the particular injury the man sustained. This is a most fallacious argument to use. In the first place there is nothing more difficult than to determine the exact amount, direction, and character of any given injury, and therefore to base an argument on such an uncertain predicate is dangerous in the extreme. A wide experience makes men very chary of using the word "impossible." Another point upon which stress was laid was that if the alleged dislocation had occurred the man would have been unable to execute a particular movement—put his hand to the back of his head. It is by relying on points of that kind that nearly all mistakes in the diagnosis of dislocations are made. It cannot be too plainly or too often said that a dislocation is in every case to be diagnosed only by the absence of the articular end of a bone from its proper position and by its detection in an abnormal position, and not by alteration in the contour or measurement of a limb or by alteration in the function of the part. If surgeons would fix their attention more rigidly and exclusively on the essential factors of the problem they have to solve, and would realise that right judgment must rest upon accuracy of observation, we should certainly witness less often than

we do such discrepancies of opinion as were afforded by the evidence in the case of CAMPION *v.* HAYWARD.

IT is idle to ignore the fact that a great deal of unhappiness is often caused by bodily defects which are so slight as to be almost beneath the notice of a medical man; yet in so far as remedies can be found for such trifling ills it is better that they should be intelligently prescribed by those who have had the requisite training and knowledge. It is the neglect of trivial ailments that is often responsible for much quackery, and it is the duty of the medical profession to save people from that resort as much as they can. Therefore, and in reply to more than one appeal from practitioners, we do not hesitate to make a few comments on a subject which is barely mentioned in text-books, but is yet a real source of trouble and annoyance to many. Hair in the wrong place, if it does no worse, reminds us unpleasantly of our remote ancestry. The growth of hair on a woman's chin certainly does not enhance her appearance, and, if we may judge by communications we receive from our readers, there are many of their patients who would wish to be rid of the disfigurement; and the advertisement columns of the lay press contain many announcements of patent preparations for that purpose.

The ordinary components of these so-called depilatories are quicklime, soda, and a combination of sulphur and arsenic. The powder is made into a paste, spread on the face or other part, and washed off as soon as dry. It acts by desiccating and dissolving the hair-shaft, and by reason of its irritating nature in unskilled hands is apt to give rise to troublesome consequences. ERASMUS WILSON narrates the case of a young lady who had been making an experiment of this sort on her forehead for the purpose of getting rid of a tuft which interfered with the then fashionable mode of wearing the hair. She had unfortunately allowed the depilatory to remain on too long, and it resulted in a slough the size of a shilling, followed by an unsightly scar. The safest of such applications is a paste of barium sulphide and starch applied by skilled hands, regulated in strength to the delicacy of the skin. KAPOSI mentions that in the Orient among the Jews a paste is used for the periodical removal of the stubble of the beard consisting of orpiment and slaked lime boiled with water. In this instance the after-growth does not appear until two or three weeks have elapsed, when the application has to be repeated. But all these methods are at best only palliative, for the formative organ remains, and they are all equally apt to be followed by a stronger growth of the hair, and sometimes they give rise to ugly marks and scars. Ointments have been employed, but in general are to be deprecated, for greasy applications tend to promote the growth of hair, as on the backs of the hands when vaseline is used to prevent chapping in cold weather. Nevertheless a strong resorcin ointment, accompanied by powerful friction, has in the practice of a few found favour. The introduction of chromic acid and other caustics into the hair bulb by means of a needle is uncertain on account of the difficulty of regulating the resulting inflammation. Another popular method of disposing of extraneous hairs is by the tweezers, a painful process and, like the preceding and the razor, only temporary.

All these methods, however, are unsatisfactory, and it is to our American cousins that we owe the introduction of the only efficient means for the destruction of hair bulbs. It was an ophthalmologist—MICHEL of St. Louis—who first employed electrolysis with success for epilation in cases of trichiasis, and it was afterwards extended to dermatology by HARDAWAY. The procedure has now become perfected, and has come to be recognised as the least unsatisfactory one for the eradication of superfluous hairs. A blunt needle connected with the negative pole of a galvanic current of one-half to one milliampère or more is introduced into the hair follicle, if possible without injuring it, and the papilla is destroyed by the decomposition products formed, these probably being caustic alkalies. The hair is then either removed or allowed to drop out, and the operation is followed by a minute red mark, which disappears either without a trace or leaving an extremely fine, shallow depression. Very occasionally these tiny scars subsequently take on a keloid growth. But electrolysis is a tedious process, for no more than twenty or thirty hairs can be removed at a sitting, a circumstance which is open to misinterpretation if the patient be not warned beforehand of the number of sittings required; and though these hairs never grow again, others come forward and have to be dealt with from time to time until all are eradicated. But in the hands of a skilled practitioner this method gives a sufficiently satisfactory result in a limited localised tuft, provided the patient does not mind the inevitable little red spots which temporarily appear after each sitting. But if the growth of hair be in any sense diffuse, on the female chin for example, the tiny hairs beside the old ones keep growing up as the others are destroyed month by month and year by year, so that an almost unlimited attendance is necessary. Indeed, so indefinite is the treatment and so frequently do complaints arise on that account, and if the current be not very carefully adjusted so difficult is it to prevent temporary disfigurement, that many professional men of standing refuse to undertake these cases. This determination on their part we believe to be a mistake, as the unsuccoured sufferer flies to quackery.

Electrolysis is the only means known up to the present time which in *capable* hands is able to destroy the papilla whence the hair grows without risk of producing serious consequences. All the other procedures, including those above mentioned, only result in destruction of the hair-shaft, in which case they are not much superior to the razor; or if the cuticle be penetrated widespread suppuration and resulting scars are apt to be produced. It is therefore the bounden duty of practitioners to warn their patients against them and especially against trusting themselves to treatment by these powerful remedies at the hands of unqualified, irresponsible, and often wholly unscrupulous persons.

IT is impossible to withhold sympathy from Dr. NORMAN MOORE in his endeavour to amend and improve the regulations relating to the proposed examination in pharmacology

at the Royal College of Physicians of London. The difficulty of dealing adequately and fairly with the subject of materia medica has frequently been mentioned in these columns,[1] and more recently[2] reference was made to the relative hardship of the regulations as they stand at present. It may not be inopportune to remind our readers of a few matters of ancient history before dealing with the present, and the future. So far back as 1891 it was felt generally that the examinations in materia medica were not giving satisfaction to anyone concerned. Students were then allowed to present themselves for examination at any date after registration, and, as to a large extent the synopsis covered elementary matters connected with the drugs of the British Pharmacopœia, there was something to be said in favour of early examination. Some students were then, it was presumed, fresh from dispensing in country surgeries, and were to a large extent prepared to state the origin of drugs, to name their active principles, and to answer questions on the composition and dose of the more important pharmacopœial preparations. Unfortunately, however, the synopsis also made mention of "medicinal action," and the interpretation of this term formed the stumbling-block both for students and examiners. It was recognised that the examination was taken before the names of diseases could have any real meaning, and the consequence was that in practice the term "medicinal action" was treated as though synonymous with physiological action. Even in this restricted sense the percentage of rejections was very high, as so many students presented themselves, as empowered by the regulations, when their knowledge of physiology was either rudimentary or non-existent. Complaints showered from all sides; parents protested against the high percentage of rejections, examiners in materia medica complained of the difficulty experienced in applying the same standard to all candidates, and the examiners in medicine were not behind in finding ignorance in prescribing, and even in dosage and composition of important drugs and preparations.

Some change was obviously desirable, and two directions were indicated in which reform might be effected. One was to leave the scope of the examination as it stood, but not to allow students to present themselves until after they had passed the examinations in anatomy and physiology. The other course, which, we believe, received the support of teachers and examiners, was the division of the subject into three parts—pharmacy, pharmacology, and therapeutics. It was suggested that the first subject might be taken at any stage, but that examination in pharmacology and therapeutics should come at some date subsequent to examination in anatomy and physiology. For some reason, which was not very obvious, this scheme was only accepted in part. The subject of therapeutics was linked to medicine, pharmacy became attenuated to a *viva-voce*, and pharmacology was suddenly raised to the importance of an independent examination. Interest, therefore, centred in the scope of the proposed examination in this subject, as well as in the definition of the term. If defined in the sense in which the word is employed in foreign countries, the proposed examination became a very serious innovation. The schedule, which appeared in due course, did not tend to relieve anxiety. Under the heading of pharmacology came the words: "The action of medicinal agents on the body in health and disease." It is not stated that this is intended as a definition, but to all intents and purposes it widens the ordinary scope of the term, so as to embrace much of what is commonly understood as therapeutics. In that sense, and in that sense only, we welcomed the schedule as a praiseworthy effort to improve education. Regarding examinations in their proper function—not as so many opportunities for rejecting candidates, but as indications of the course of study which it is most profitable to follow—the scheme of an examination into the action of drugs appeared to be a step in the right direction.

Statistics of the examination in pharmacy show that students now find much greater ease in satisfying the examiners, and it might have been hoped that the same happy result would have attended the examination in pharmacology, but the objection has been urged that candidates may now be rejected twice in what is really one subject. It may be doubted whether this risk is as real as it appears, especially in view of pharmacology being taught when physiology has been mastered. Still, the risk has to be reckoned with, and Dr. NORMAN MOORE's proposal is intended to remove this objection. He suggests the revival of the term "medicinal action" and its insertion in the schedule of pharmacy, and he proposes to omit a separate examination in pharmacology. He also proposes that the examination in pharmacy shall in future be conducted after the examinations in anatomy and physiology. What "medicinal action" has to do with pharmacy seems difficult of explanation. It is certainly not included under that heading in the definitions in the first pages of most books on materia medica, and from the official standard of pharmacy, the British Pharmacopœia, it is excluded. If these proposals are accepted by the Royal College of Physicians of London, the course of examination and of teaching during the transition stage will become very involved. The task of students and of teachers is not easy when regulations are subject to such frequent changes.

[1] THE LANCET, May 30th, 1891; THE LANCET, Feb. 20th, 1892; THE LANCET, May 6th, 1893.

[2] THE LANCET, Jan. 4th, 1896.

Annotations.

"Ne quid nimis."

THE NEW PHOTOGRAPHY.

ALL sorts of crude ideas seem to be current as to the application in medicine of the new radiations or "x" rays. We had an enquiry from a lay correspondent last week as to where the apparatus producing these new radiations could be obtained, "as it was wanted for a case of consumption." But a very general impression appears to be that the rays have been obtained in such abundance as to be able to permeate through any thickness. This is not so, and the source of the rays must be infinitely more powerful than is obtainable by present means if they are to be capable of assisting in the exploration of remote cavities in the human organism. Excellent photographs have been produced of bodies such as the hand, which are not sufficiently thick to offer a complete resistance to the passage of

the rays. It is just the same with a thin sheet of glass which is transparent enough to ordinary light, but on increasing the thickness of the sheet a block may at length be obtained which is almost completely impervious to light. Still there is no gainsaying the fact that much good work may be done with the means at present available towards utilising the discovery for surgical purposes. Thus foreign bodies, bullets, &c., have been located with distinctness in the hand, and the extent and position of necroses have been usefully ascertained. We learn also that photographs have been produced of tuberculous affections of finger-joints, and also of one case of a thigh bone attacked with osteomyelitis. In the latter case the method has proved valuable in indicating that the disease known under this name is wrongly considered as a variety of periostitis, since if this were so the bony alterations would have transferred themselves from the surface to the centre, whereas the photograph shows that the surface of the bone is intact whilst the internal layers are destroyed as far as half a millimetre from the surface. During the week it has been announced that the flame of a Bunsen burner and of an ordinary paraffin lamp evolved the same radiation, but in a less degree, yet enough, it is said, to produce more or less distinct photographs of the unseen. But the most remarkable development of Roentgen's discovery is that announced from Rome, in which it is stated that Professor Salvioni of Perugia has just discovered a means by which these radiations may be made to so far assist the eye as to enable it to see through all objects which the rays can penetrate, so that the contents of a closed space are revealed. This discovery, if true, will far outstrip the former one in connexion with its importance as an aid in diagnosis. The nature of these rays is still a puzzle, but the theory which regards them as material radiations seems to be rapidly gaining acceptance. The fact that similar shadow effects may be produced without a Crookes' tube and by merely placing a negative behind the discharger of the induction coil would point to electrical effect. The most intelligible theory is, we venture to think, that suggested by Mr. J. W. Gifford. He likens the Crookes' tube to a vibrating tuning-fork, which, if sounding simple A, would set an A violin string vibrating not only A, but its octave and the fifth to its octave and quite a host of other overtones or harmonics of rapidly decreasing wave-length which would seem to have no theoretical limit. The waves of long period from Crookes' tube would pass through wood, paper, the human body, without much resistance, but would be absorbed or reflected by the denser metals. But if objects capable of taking up their vibrations lay in the path of these long waves they would set them vibrating like the violin-string, and might in the same way produce overtones which did not before exist. These overtones may include waves of such short lengths as to cause the objects themselves to become luminous. If so, the light waves in question, although they are directly instrumental in darkening a photographic plate exposed to them, have nevertheless not passed through, and could never pass through, the obstacles easily traversed by the electric wave which gave them their origin. If this be so, the new photography is in reality electrography.

THE PRESENTATION OF SIR HENRY HALFORD'S LETTER TO DR. SCUDAMORE TO THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AT the Comitia of the Royal College of Physicians of London on Jan. 30th the letter of Sir Henry Halford to Dr. Scudamore on the use of the stethoscope [1] was accepted by the President and Fellows, and it was unanimously resolved that this should form the nucleus of a collection of letters from eminent men connected with the profession and with physical science. It was recently remarked by one of our contemporaries that "intimate personal glimpses of a man give us a better grasp of his character and work than reams of his biography"; and there is no doubt but that letters afford such intimate personal glimpses as can be derived from no better source, except perhaps from such verbatim reports as Boswell gave of Samuel Johnson's colloquies. It is true, perhaps, that the greatest men have left the least material for their biographies, and it is only in their works that we find evidence of their merits. There are men, however, like Sir Henry Halford who have left but little to keep them in remembrance, but their influence on their contemporaries and their example were remarkable. It will need much judgment to select from the large number of letters that will probably be offered to the College; but from the words of the resolution it is evident that the professional or scientific value of these letters will decide their acceptance. A very interesting collection will, we hope, be made before long.

[1] Munk's Life of Sir Henry Halford, page 270.

"HEMIPLEGIA AS A RESULT OF GONORRHŒA."

WE are sorry that the manner in which, in an annotation in THE LANCET of Jan. 11th on this subject, we stated our disagreement with the explanation offered by Dr. Bruns in reference to a case observed and reported by him should have led him to believe that we considered any view of his "absurd." It is, perhaps, unnecessary to say that we did not in the annotation referred to make use of this word. We merely stated the difficulty we had in accepting Dr. Bruns's view that an embolus capable of obstructing a cerebral artery of considerable size should have travelled from the region of the Fallopian tubes without getting caught in the lung capillaries, and we suggested an alternative explanation. In the "Manual of Diseases of the Nervous System," second edition, p. 422, Dr. Gowers remarks under the heading Cerebral Embolism: "The source of the plug must be somewhere between the lungs and the brain. ..... It is possible that septic material may pass through the lungs and lodge in the brain, but only capillaries can be obstructed by particles that pass through the capillaries of the lungs, and any local softening of the brain thus produced is usually purulent, a cerebral abscess, or minute points of suppuration." This we believe to be the generally accepted view, and while readily acknowledging that it is comprehensible that Dr. Bruns did not deem it necessary to explain, as he has done in his letter in THE LANCET of Feb. 8th, his interpretation of the pathogenesis of his case, we may perhaps express the opinion that if he had done so it might have prevented misconception, even if his explanation had not carried conviction.

THE SOLDIER'S AGE.

FROM the time of Cæsar to the present day there have always been soldiers who have been able to express themselves in terse and incisive terms and go straight to the point; and, to compare great things with small, we may say that a major-general in a recent communication to the *Times* has gone straight to the point in his remarks on the youth and immaturity of the men composing our army. It is, no doubt, true that, on the grounds of physiology and common-sense experience, men—in common indeed with all animals—sustain fatigue best when fully grown. Youthful soldiers are prodigal of pluck and *élan* and they have sufficient resiliency of constitution to recover quickly, but the youthful soldier has not the physical strength and endurance to make long marches or to undergo the hard work and fatigue which he must sustain from time to time in war and on field service. Generals know that quite as well as medical officers, and when real hard work has to be done they act accordingly. Lord Wolseley

no doubt selected the Composite Battalion for Ashanti, and Lord Roberts took care to have the troops accompanying him on the march to Kandahar mainly composed of matured men and not striplings. But we must, after all, take our soldiers when we can get them, and we can only recruit them young. After they have been fed and trained, and have served some few years in the army, they make fine soldiers and have always given an uncommonly good account of themselves. A soldier is probably of the greatest value between twenty-five and thirty-five years of age, when the fullest measure of air can be changed in the lungs, and he should in any case be over twenty-one years of age before he is fitted to undertake the frequently prolonged physical exertion required of him in the field. Circumstanced as this country is, the men serving with the colours must be mainly composed of young and immature soldiers; but then we are not in this respect a bit different from other countries and armies. If nations were content with small armies it might be otherwise, but so long as things are as they are we must have a short-service system. In the event of our being engaged in a big war, circumstances will be different to what they have been hitherto; the reserve force which will then be added to the army will consist of physically matured men. The introduction of a short-service system with the other changes which have taken place of late years seem to us to have been essentially necessary, and, notwithstanding all that has been urged against it, no one has been able to point out any scheme that is better and at the same time practicable.

THE CURSE OF LEARNING.

THE *Edinburgh Medical Journal* for January continues the valuable series of papers by Dr. W. Ireland upon Mental Affections in Children, and the subject treated of in this section is the overstrain of examination and the enormous and useless amount of subjects children and all examinees are required to know. We commented last week upon a paper recently set in chemistry at the University of London to candidates for the M.B. degree, a paper which took next to no heed of the medical side of chemistry, and we believe the same evil is paramount in most places. An examiner thinks only of his own special subject. The whole system of teaching is wrong. Take, for example, the London School Board, a body founded for the purpose of "elementary education." This sapient body's idea of elementary education is to teach thirty-six distinct subjects, among which we may mention botany, experimental science, physics, physiology, natural philosophy, object lessons, suitable occupation (!), social economy, and domestic ditto. We do not suppose that any unfortunate child is taught all the thirty-six subjects, but the facts above stated show very well what is the idea of the modern "educationist" (to use his own abominable term) as to what is meant by elementary. To quote Dr. Ireland: "This inordinate desire for examining and being examined is not confined to the medical profession; it pervades well-nigh all branches of learning. In my opinion it has already inflicted enduring injury to many of the studious class in our population, and is likely to go on helping to increase the tendency to exhaustion and irritability of the nervous system. ..... The stamp of talent is put upon the back of heavy diligence and the knowledge certified is of an unhealthy and evanescent character." Every medical man knows how the strain of examinations affects school children, Board and otherwise, and we have no hesitation in saying that the results attained are in no way commensurate with the expense and trouble incurred. Every householder knows what the average modern workman is like. Here and there one finds an intelligent man, and bodies like the Guild of Handicraft in the Mile-end-road turn out craftsmen who take a pride in their work and do it well; but what shall we say of the average gas-fitter, carpenter, or electric-bell man? These apply no common sense nor do they think. Recently we sent for a workman to fix a lead and push to an electric bell. He came and went away. On trying the bell it would not ring. We examined the connexion and found he had put both wires of the lead on to one terminal of the wires connecting the battery to the bell. It had never entered into his head to try if the bell would ring before he went away. This is the result of modern education. Children are taught a smattering of everything and learn nothing. Elementary schools ought to teach nothing but reading, writing, arithmetic, swimming, cookery, and needlework. The religious question is outside our province, and the other thirty subjects had best be relegated to Astolfo's limbo at the other side of the moon.

DEATHS UNDER ANÆSTHETICS.

A MARRIED woman aged fifty-one years was admitted into the Birmingham Hospital for Women on Dec. 31st, 1895, suffering from an enormous ovarian tumour of very rapid growth. She was seen by Mr. Christopher Martin, the surgeon to the hospital, on Jan. 1st, 1896. Both legs were œdematous and there was albumin in the urine. The heart was displaced upwards and to the left. The pulse was rapid (136) and feeble. No murmurs could be detected. She was in a very exhausted condition and a most unfavourable case for operation, but it was obvious that her only chance lay in ovariotomy. On the 3rd she was prepared for the operation. An ounce of brandy was given to her, and the anæsthetic (a mixture of ether, two parts, and chloroform, one part) was administered with Clover's inhaler by the sister in charge under Mr. Martin's supervision. In about five minutes the patient began to show signs of cardiac failure and the administration was at once stopped. Her pulse could be felt at the wrist, but it was slow (60) and feeble. Her breathing became embarrassed and her lips bluish. It was decided to postpone the operation and she was lifted back to bed. She continued to fail, her pulse became weaker, and her breathing finally ceased. All the usual restorative measures (including artificial respiration) were applied, but without avail. Dr. Kauffmann, who made the necropsy, found, in addition to a very large adherent ovarian tumour, that the heart was in a condition of marked "brown atrophy," and that there were signs of old pleurisy on the left side. She evidently died from a combination of causes: (1) her exhausted state; (2) the degeneration of the cardiac muscle; (3) the mechanical pressure of the tumour on the heart; and (4) (only to a limited extent) from the anæsthetic. It seems to us most irregular that under any circumstances the grave responsibility of giving an anæsthetic should be relegated to a "sister in charge." Under the circumstances of the case given above the irregularity becomes even more serious. The patient was clearly in a very precarious condition, requiring a most careful and experienced medical man's attention for the successful production of chloroform narcosis, and yet she was committed to the necessarily irresponsible nurse. Unless the account which has reached us is inexact we cannot feel satisfied that Mr. Martin's supervision makes the case less irregular; and it is transparently plain that a man cannot give his undivided attention to the performance of ovariotomy and the administration of an anæsthetic. The second point is the employment of a closed inhaler, such as Clover's, for the administration of a mixture containing chloroform of the strength of 1 in 3. This proceeding is to court disaster even in skilled hands. The practice adopted cannot be deprecated too strongly. We have also received particulars of a death under chloroform which occurred in St. Bartholomew's Hospital. The patient,

a boy aged six and a half years, suffered from actinomycosis of the left pleura. From time to time abscesses formed and were opened under chloroform. In September of last year the original empyema had been opened. On Jan. 14th, an abscess having formed in the chest wall, chloroform was administered by the house surgeon in charge by dropping it on lint. This was the fifth time the boy had taken chloroform. When the child was almost under and one and a half drachms had been used the pupils suddenly dilated and respiration stopped. The pulse was felt to be still beating. All the methods resorted to to promote recovery failed, and although artificial respiration was kept up for a considerable time it never elicited any return of natural breathing. The necropsy showed that the left lung was almost completely collapsed owing to the thickening of the pleura, but otherwise no notable pathological condition appeared to have existed. The fact noted that the pulse kept on for an appreciable time after the sudden cessation of the respiration points rather to death from poisoning of the centres than to neuroparesis. The case is important in the connexion that the oft-repeated fallacy that because a person takes chloroform safely once or twice he will do so always receives once more its refutation. Again, the pulmonary inadequacy of the child was a further danger to him. The peril of an overdose through insufficient expiratory force is often overlooked, and in this case it appears probable that the patient's efforts in this direction were at least half the normal and possibly even less than this, and hence the liability to receive an overdose would be at least doubled, in spite of the fact that the risk of absorption was lessened.

MEDICAL CONSULTATIONS BY ORDER OF BOARDS OF GUARDIANS.

SOME guardians rejoice in a pretext for intervention in the medical department of the workhouse or infirmary, their activity usually taking the form of a fussy interest in a patient, who is thereby led to expect great things from the influence of "the committee gentlemen" or even "the board" itself. The medical officers can hardly be expected to regard these proceedings with equanimity, for they are aware that not only is no practical advantage likely to result, but there is also much probability of their being called on to furnish unnecessary explanations and reports. A conspicuous example of this kind has just occurred at Clitheroe, and it does not often happen either that a board of guardians put themselves so much in the wrong or that a medical officer champions his rights and vindicates his position so triumphantly as in this case. One of the workhouse inmates, an imbecile girl in her fourteenth year, suffers from slight knock-knee and has only been able to walk indifferently ever since she was two or three years of age. Some of the guardians imagined "that if she were subjected to special treatment she might be cured by her legs being broken," and with a view to her being transferred to some hospital Mr. Fraser, the medical officer of the workhouse, was asked for his opinion as to the girl's condition. Having reported on Jan. 20th that the case was unsuitable for admission into a hospital, he received from the clerk of the guardians a letter stating that on receipt of the report the guardians had passed a resolution requesting him to call in two medical men, whom they named, to assist him in examining the patient and to report subsequently whether there was any chance of her being benefited by special treatment. Mr. Fraser very properly ignored the resolution of the guardians, but consulted Dr. J. M. H. Martin, senior surgeon of the Blackburn Infirmary. This gentleman was of opinion that the patient's difficulty in walking was partly dependent on her mental condition and that no improvement was to be expected from an operation. Having fortified himself as regarded the surgical aspect of the case, Mr. Fraser next proceeded to investigate its legal side. He wrote to the Local Government Board, and in the reply to his letter was informed "that the guardians are empowered, if they think it desirable, to employ independent and competent practitioners, *not being medical officers* of the union, to report to them upon the condition of" the patient. Mr. Fraser also had a case submitted to Mr. A. MacMorran, a well-known legal authority on Poor-law questions, author of "The Public Health Act, 1895," and also co-editor of the leading work on the Poor-law Consolidated Orders. Mr. MacMorran said: "I am of opinion that the guardians cannot require the workhouse medical officer to meet any other medical man in consultation. The duties of a workhouse medical officer are prescribed by the General Consolidated Order of July 24th, 1847, and there is no mention in that order or in any subsequent order of such consultations in cases like that before me." Mr. Fraser thereupon pointed out to the board of guardians that the resolution passed by them was in excess of their powers, but his remonstrance, though firm, was perfectly courteous, and he was willing, if they still wished for a further opinion, to meet in consultation on the case any surgeon of professional standing and experience who holds a position on the staff of any public hospital. The guardians at their meeting on Feb. 3rd admitted their error and retreated from their untenable position. Mr. Fraser is to be greatly complimented on his public spirit and on his energy in clearing up certain legal points which are of much interest to Poor-law medical officers.

TO THE DEGRADATION OF THE SPECTATOR.

IN these modern days of boasted civilisation it seems a pity that some restriction cannot be put upon such exhibitions as that which is at present one of the items of the programme at the Royal Aquarium. A man is shown in a condition of trance produced by hypnotism, in which state it is proposed to keep him for thirty days, more than twenty having already passed. The subject is twenty-nine years old, and a well-built man; he was, when seen, lying flat on his back with his limbs stretched out in an easy position and his head turned a little to the right. His face was pale, with a slight pink flush on each cheek, and his appearance gave the observer the impression of a man who had been ill for some time. His pulse was 52, quite regular, and of fair tension. Respirations were chiefly abdominal, and were 8 to the minute and regular. Occasionally he gave one or two deep sighs like a man about to wake, and in these the thorax was more actively moved. His larynx was occasionally raised as the act of swallowing was involuntarily performed. Slight twitching of the eyelids and an occasional twitch of the legs were the only visible movements. The eyes were closed, and on opening them the eyeball was turned upwards and outwards, and the pupil was dilated. His temperature that morning was recorded to have been 97·2° F. He is fed with peptonised milk through a tube, and it was said that he is getting about a pint a day. The above is a short description of the performance which is conducted as a public exhibition. At stated intervals in the day the hypnotist gives lectures on the subject and demonstrates the insensibility of the man to an admiring audience, and in his absence an assistant takes charge. A medical man also sees the subject at intervals and signs bulletins as to his condition. Apart from the disgusting nature of any such exhibition there is no doubt a certain element of danger, and if anything were to happen to this man it would be interesting to know who would be mainly responsible. The assistant, who is there a great deal by himself, states that he has no orders

to look out for any special symptoms, and, moreover, it may be doubted if he would recognise them if they occurred. The hypnotist himself, when pressed for an answer as to what he would consider dangerous symptoms, was not very precise, though he confessed that a pulse much below 39 and breathing 3 per minute would not be pleasant, but he carefully made a loophole for himself by stating it would depend on the opinion of the medical man. It must, however, be admitted that he is quite a physiologist, as he gravely informed us when pressed about the rate of the pulse that "some people had naturally a slower pulse than others." It is, in truth, high time that such public exhibitions were stopped; to science they are of no purpose, to the subject they are dangerous, and to the public they are demoralising. It is indeed a pity that any medical man should so far lose his self-respect as to encourage them.

THE MANNERS OF A COUNTY COUNCILLOR.

AT the usual weekly meeting of the London County Council, held on Tuesday last, the question of paying £75 to Dr. Corfield for evidence given on behalf of the Council at a Local Government Board inquiry into the water companies' regulations came up for consideration. In the discussion which followed Mr. Burns is reported as saying that Dr. Corfield "had disgraced his profession by blackmailing a public body." We hope, indeed we are sure, such language is not commonly used by county councillors; but, in the report of the proceedings as given in the *Times* no one seems to have taken any notice of it. To have said "swindling" or "defrauding" would have been indefensible, but the word "blackmailing" implies the lowest depths of infamy. Dr. Corfield is no doubt able to defend himself, and we are glad to see that it was agreed that he should receive the full sum, but we think Mr. Burns ought to apologise for the use of such a shameful remark.

"SWEATING" IN GERMANY.

THERE is a strong agitation throughout Northern Germany against the sweating system. It is especially in the making of clothes that the worst features of this system are manifest. This is exactly what we insisted was the case when we raised a similar agitation in England. The giving out of work to be made up in private houses, we then explained, led to terrible abuses. In the privacy of a home child and even infant labour could be employed to help. The clothes were also frequently contaminated by unwholesome domestic surroundings, it being especially to the interest of the workers to conceal the cases of scarlet fever and other infectious fevers that might occur in the family. Indeed, the unfinished garments were sometimes used to cover the patients as they lay in bed in the very room where the rest of the family were at work. In Berlin, Hamburg, Breslau, and other towns strikes have commenced against the sweating system. At Berlin the first burgomaster has received a deputation from the largest mantle makers of the capital asking him to act as a mediator between them, the sweaters, and the workpeople. Although the chief blame rests with the middleman or sweater, yet it is also the fault of the merchant tailors, mantle makers, and others, who instead of opening properly built workshops prefer to employ a middleman. It would make a very great difference if the money paid to this middleman went directly to the workers; but as it is out of this sum that he "sweats" his profit a very meagre share remains for them. A widow the mother of three children, engaged in mantle-making by a Berlin sweater, writes that she is only paid 8*d*. for making a jacket. By working incessantly from four in the morning till eleven at night she is able to turn out two jackets and thus earn 1*s*. 4*d*. a day to keep her family. Living is not cheap at Berlin, and it is not necessary to insist how such overwork and under-feeding must prove destructive to health. It is high time that there should be a Factory and Workshops Act in Germany which would include home labour and limit the hours of work to ten, at least as far as women are concerned. But it would be better still to abolish home work altogether. So long as clothes are made in the overcrowded homes of the poor there will always be the risk of contamination. The public who purchase and wear the clothes have the right to say how these clothes shall be made, but this can only be done through the instrumentality of their representatives in Parliament. At the commencement of his reign the present Emperor on several occasions expressed his eagerness to bring about such social reform as would assure greater material prosperity among the mass of the people. The present agitation against sweating affords an excellent opportunity for effecting reforms of this description. The German Government will, we trust, strike while the iron is hot and initiate legislation on the lines we have indicated.

"THE ENGLISH LAKES."

THE mere mention of the English lakes will awaken in the minds of many people emotions of pleasure and visions of picturesque landscape, with lovely valleys, majestic hills, and the ever-changing aspects of land and sky. "The English Lakes,"[1] by Mr. Hugh Robert Mill, D.Sc., however, records the details of a bathymetrical survey; nevertheless, although it does not deal with the matter from an artistic point of view, any addition to our knowledge, either geographical or geological, of the beautiful lakes situated in the mountainous region of north-western England will be welcomed by both men of science and travellers. As Mr. Mill remarks, when scientific surveying reaches such a high level of efficiency as it now does in this country, it is neither rational nor right that the best maps should show the minutest details on land and only meaningless lines on the water. This defect in the maps of the lake district he has remedied in a very able manner. The maps, which are taken from the Ordnance Survey, are on a scale of two inches to the mile and are clearly printed. They are accompanied by cross and longitudinal sections of the lakes. The letterpress, which is full and complete, is embellished with a number of illustrations showing the physical features of the lakes.

NOTTINGHAM BURIAL GROUNDS.

DR. PHILIP BOOBBYER, the medical officer of health of Nottingham, has recently prepared a very interesting report on the cemeteries and burial grounds of that city, the information having been called for by way of evidence to support a local scheme of extra-mural interment. Nottingham possesses nine burial grounds at present in use, covering a total area of fifty-four and a half acres, the oldest being St. Peter's churchyard, Radford, which has been open since 1553. It is three and a half acres in extent and is very much overcrowded, being estimated to contain from 13,000 to 14,000 bodies. Bulwell churchyard was opened in 1621 and has been four times extended, so that it now includes four acres; from 20,000 to 25,000 bodies appear to have been buried here. The seven remaining places of interment have been opened subsequent to 1830. Of these the General Cemetery, opened in 1837 and covering eighteen acres, is the most considerable. It is situated almost in the heart of the town and no fewer than 81,074 bodies have been buried there under circumstances of much overcrowding, the graves being packed as closely as they will lie, each with an allowance of only sixteen superficial feet instead of the thirty-six superficial

[1] Published by George Philip and Son, London and Liverpool. Price 3*s*. 6*d*.

feet required by the regulations which were issued by the Home Secretary in 1857 and 1863, but were unfortunately not made applicable to burial grounds in use before the passing of the Burial Acts. In the fifteen acres of the General Cemetery which have been already used there have been laid an average of 5400 bodies to an acre and, strange as it must appear, the authorities consider that there is space for at least 60,000 further burials, which would imply an ultimate accumulation of 8000 bodies per acre. Dr. Boobbyer is of opinion that the amount of land in Nottingham laid out and still available for burial purposes may be reckoned at eleven acres, and as the average annual deaths are 4000 it follows that, roughly speaking, about two acres of cemetery space are required every year. He therefore recommends that two fresh cemeteries should be provided, one in the outskirts of Sneinton and the other adjacent to Bulwell. He remarks that a new cemetery would not be complete without a crematorium, and adds that such a structure should be under the management and control of a public rather than a private corporation. Sneinton churchyard, which is now available only in exceptional cases, is supposed to have been in use since about the twelfth century.

A CRUEL TRICK.

No practice, however discreditable, is entirely beyond the possibility of plausible excuse. Be it never so irrational and fallacious, we may rest assured that the plea of not guilty will always be supported by some show of argument. The practice of cruelty constitutes no exception to this rule. It may be doubted, however, if any but its actual perpetrators could be found to defend such conduct as that which recently led to the conviction of two horse-dealers at Wakefield. Their offence was that of "nicking" horses. This process it appears consists in incising the flexor muscles underneath the tail, this organ being afterwards held up by means of a rope carried over a pulley, with the object of giving the tail a fashionable upward "set." As the desired result is not very rapidly attained the pain and fatigue imposed on the animal thus treated is considerable, and a sentence of £6 fine and £7 1*s.* 6*d.* costs imposed on each defendant in the action in question was certainly not excessive in its severity. Such a proceeding is not only unjustified by any plea of necessity or utility, but it must in some degree injure the animal by inflicting upon it a permanent deformity. It amounts, moreover, to a species of fraud, for it is doubtless intended that the artificial "set" of the tail should be accepted as a natural production and a mark of spirit and stamina.

THE PROPER TEMPERATURE FOR VAGINAL INJECTIONS.

THE *Leeds Evening Express* of the 6th inst. contains the report of a case tried in the Leeds county court in which the principal question at issue was whether or not water of too high a temperature had been used by a medical man as a vaginal douche in the treatment of hæmorrhage. Several witnesses swore that they asked the medical man if the water was not too hot and he made no reply. The witness who gave him the water swore that it was boiling and that she had told the medical man so. As a matter of fact, some large blisters appeared subsequently on the patient's body, and it was alleged that they were produced by the excessively hot water used. The county court judge found that the water used was scalding and not fit to use, and that it did cause the injuries complained of. He did not find that it was necessary to use such hot water to save the woman's life. He held that the medical man was guilty of malpraxis because he did not observe that the water was scalding, and damages to the extent of £15, less the medical man's claim of £3 10*s.* for medical attendance, were awarded. It appears from the report that the patient was confined on Oct. 21st last, and that the hæmorrhage, for which the injection of hot water was used, occurred on the fourteenth day when she got up—that is to say, it was a case of secondary post-partum hæmorrhage. The medical man was sent for at 2·30 in the afternoon, but he did not go at once "as he was busy in his surgery, and had other cases to attend to." He did not actually see the case, according to the report, till a quarter past five. By his own account the patient was then pulseless, and he thought *in extremis*. He then used the injection of hot water complained of. The lesson of the case is that in cases of hæmorrhage, especially occurring not long after a confinement, it is wise to attend at once, if in any way it is possible to do so; and also that water to be used for vaginal and uterine injection should be carefully tested first with the hand thoroughly *immersed* in it. The temperature of the water should not exceed 120° F., but the hand is the readiest test, and for this purpose as reliable as any thermometer.

PRESENTATION TO DR. W. M. DOBIE.

THE inhabitants of Chester have marked their appreciation of Dr. Dobie's labours among them during the past forty years by presenting him with a portrait of himself in oils, painted by Mr. Ouless, R.A. The presentation was made in the Town-hall, Chester, in the presence of a large and distinguished company, presided over by the Duke of Westminster. Too often the labours of medical men are left unrewarded, and it is gratifying to us to be able to record a testimony of gratitude on the part of the public for the devotion to duty shown by any individual member of the medical profession. Dr. Dobie became honorary Physician to the Chester Infirmary in 1875, which post he resigned in 1894 and was appointed consulting physician in the following year. He was vice-president and subsequently president of the Chester Society of Natural Science and Literature, from which institution he received the Kingsley medal. In 1883 and 1892 he was elected president of the Chester Medical Society, and a few years ago was made a Justice of the Peace.

THE LOCAL GOVERNMENT BOARD AND THE ISLINGTON GUARDIANS.

BUT for the chance of some happy accident there seems to be a possibility of the great parish of Islington making another huge mistake in the matter of workhouse accommodation. Our readers are aware that for some time past the guardians, or rather a majority of the guardians, have shown great reluctance to realise the gravity of their defects of accommodation and the inadequacy of their medical and nursing staff. They seem to have been more concerned in the enjoyment of defying the Local Government Board than in making decent provision for the poor committed to their charge. At their meeting on June 30th a letter was read from the Local Government Board, which seems to be regarded in some quarters as a concession to the defiant section of the guardians. And it certainly reads too much like this. But whoever gets satisfaction out of this apparent concession, the public of Islington are likely to have to pay dearly for it. The Local Government Board enclose a report by their assistant inspector, Mr. Herbert, after his visit on Jan. 13th, showing an overcrowding of the infirmary to the extent of 186, or 38 per cent. Mr. Herbert remarks that this appears to him "to be very serious." So it appears to us. The workhouse itself contained 886 persons, being certified for only 781. The guardians themselves had partially realised this overcrowding and sent 70 healthy aged men to Bowes Park and 50 able-bodied men to the Salvation Army Colony. The guardians have a little scheme for buying adjoining property and getting a temporary increase

of accommodation. But the Local Government Board "are strongly of opinion that the scheme of infirmary extension as proposed by the guardians will be unduly costly, having regard to the limited accommodation which can be provided under the scheme and inadequate for the requirements of the parish for the in-door poor." It will be a serious thing for the public of Islington if at a great cost neighbouring property is bought up only to supply accommodation which in a very few years will be inadequate. Yet the Local Government Board have so far given way. They invite the guardians to further consideration of their inspector's report of the great mortality of the infirmary and other facts. They say that the adoption of the scheme of the guardians will be an unfortunate one in the interests of the parish. They will not withhold their assent to the scheme "as an instalment of the further accommodation required," and provided that the Board are given assurances of early possession &c. Clearly the Local Government Board have ulterior views as to building a workhouse at Bowes Park or on some other site. The guardians will incur a heavy responsibility if they patch up the present buildings at a great cost and in a few years find themselves compelled to begin *de novo*. This will be a poor compensation for any short triumph over the authorities of the Local Government Board, who in this controversy represent true economy and the interest of the sick poor.

A NOVEL SUGGESTION.

AT the meeting of the Bath town council held on Feb. 4th it was recommended, in accordance with the report of the Baths Committee, that the council should advertise for a manager of the baths at a salary of £250 a year. A member suggested that a medical man should be appointed to the post. It was not mentioned in what way he would be required to act, except that the fees paid according to a tariff should be paid into the city treasury. It is, therefore, to be presumed that the medical manager would have been required to supervise the bathing establishment, diagnose the cases, and prescribe the variety of bath to be taken. The members who made this proposal have an idea that the present generation of medical men in Bath receive very generous remuneration. Unfortunately, when this suggestion was first made at the Baths Committee the only member of the profession on the council now in practice was absent. An alderman described the proposal to appoint a medical man as manager of the baths as flagrant nonsense and protested against the medical men of Bath being considered as a band of marauders or set of professional pickpockets. The fees, he added, were the same as they were thirty years ago. An amendment that either a layman or a medical man be appointed was defeated, seven only voting in its favour, and the recommendation that a general manager be elected was carried. The council are to be congratulated on their action, as had a medical manager been appointed it would scarcely have failed to have caused endless friction with the members of the profession who have patients using the baths.

THE SCOTTISH POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

WE congratulate the members of our profession holding parochial medical appointments in Scotland on the recent formation of an association for mutual protection and support. As mentioned in THE LANCET of Dec. 21st, 1895, the first meeting was held in Glasgow on Dec. 9th, and the inaugural dinner, a report of which appears in another column of our present issue, took place in Glasgow on Jan. 31st, the chairman and principal speaker being Dr. William Bruce of Dingwall in Ross-shire, the direct representative of Scotland in the General Medical Council. We heartily sympathise with the objects of the society and trust that it may have many supporters.

SMALL-POX AT CARDIFF.

THE Vaccination Committee of the Cardiff board of guardians has passed a resolution advising the appointment of six assistants to the vaccination officer to make a house-to-house inspection in order to discover the number of unvaccinated children in the town. This is a step in the right direction and one to be commended to the notice of boards of guardians in other large towns.

STREET NOISES.

WE are glad to see that the worm has begun to turn, and in saying this we hope that Mr. H. C. Mitchell, manager of the Consolidated Bank, 450, Strand, will pardon us. He made an application to Mr. Vaughan upon Tuesday last to know if nothing could be done to stop the annoyance caused by newsvendors' shouting. Mr. Vaughan expressed his deepest sympathy, but said he could do nothing. We are accustomed to this kind of answer from Ministers, but we did expect more from a magistrate. If the law can do nothing the law must be altered. We can fully sympathise with Mr. Mitchell, but besides the nuisance he complains of there are others innumerable, for instance the discordant piano-organ. The remedy is easy—every hawker of buttons, brooms, and other articles has to have a hawker's licence; and licensed hawkers are a harmless race. Let a short Act be passed making it necessary that anyone who makes a noise of any sort in the streets for the purpose of earning a living should pay for a licence to do so. Thus a licence to shout "winner" or "'orrible slorter" should cost £10 a year, one to grind a piano-organ £25, and a German band—well, say, £200. It is no matter for joke or laughter—the constant irritation caused by these pests breaks down men's minds and bodies, and the Government which stops the nuisance will go down to posterity in company with the most beneficent of past times.

THE EAST LONDON WATER INQUIRY.

THE departmental inspectors appointed to inquire into the shortness of the water-supply in the East end of London last summer have issued and presented their report to the Local Government Board. Its conclusions are in striking agreement with a summary of the position which we drew up in THE LANCET of Oct. 12th last year—indeed, as a reference will show, the annotation we allude to proves to have been a very fair forecast of the conclusions and recommendations which Colonel Ducat, R.E., and Dr. Barry have just published. Thus they report that owing to the combined effects of frost in the winter and of prolonged drought in the summer a "maximum strain" was put on the resources of the East London Water Company, but that this maximum strain would probably not have been reached had not the London County Council blocked the proposals of the water company to extend their storage capacity some years ago. The scarcity of water for drinking was, in the inspectors' opinion, due to a large number of unrepaired pipes on the consumers' premises and to excessive use of water for garden purposes, and the inconvenience experienced by many consumers would to a large extent have been obviated by proper provision for domestic storage. With a supply that is liable to be intermittent cisterns become a necessity, but every care should be taken that these should be situated and constructed in accordance with the highest sanitary demands. The inspectors recommend the adoption of a tight box, consisting in reality of a capacious enlargement of the service pipe, so that dirt could not gain access and exposure to unhealthy environment would be

reduced to a minimum. We still maintain, however, that for the exclusive purpose of a drinking supply water direct from the main should when possible be drawn. This does not mean the abolition of cisterns or of some means of domestic storage, for the service pipe may be made to branch into two, the one to feed the cistern and the other to supply directly to the tap. The consumer would then have only to resort to the cistern supply when the main for some good reason or other is turned off. Then water, brilliant and sparkling under the influence of the pressure of the main and free from the risks of contamination of exposure, would with few exceptions be available.

AN UNSATISFACTORY VERDICT.

IT is a familiar commonplace that a coroner's inquiry often falls short of success in its primary and essential function—the ascertaining of the cause of death. At West Hartlepool the coroner lately had occasion to investigate the circumstances leading up to the death of a lad fourteen years of age, who on Jan. 30th was engaged in his usual occupation of wheeling an old man about the streets in a bath chair, and retired to rest about 9 P.M., being then in good health and spirits. At 3 A.M. and again at 7 A.M. on Jan. 31st he complained of great thirst and also of feeling unwell, and was each time given a little water, which he drank. About 9 A.M. as he still felt very ill his mother gave him some tea and sent for a medical man, but before he arrived the lad expired quietly, and, as it seems, only a few minutes after taking the tea. On Feb. 1st Dr. Gray, who was instructed by the coroner "to see the body of" the lad, found it "laid out and dressed" in the room where he had died. Everything had been removed from the room except the bed, but an examination both of the furniture which had been in use and of the clothing worn by the deceased did not result in the discovery of any bottles, sweets, or other articles capable of throwing any light on the fatal issue. The body was fairly well nourished, bore no marks of violence or injury, and did not emit any odour suggestive of volatile poison. At the inquest Dr. Gray, being asked by the coroner for his opinion as to the cause of death, very properly replied that it was impossible to specify the cause of death without a post-mortem examination. The jury thereupon, after a short consultation, returned a verdict of "Death from natural causes." A verdict such as this is not a protection against crime or misadventure and obviously is of no public utility.

AS we have already announced, there will be a debate at the next meeting of the Pathological Society of London on Tuesday, Feb. 18th, at 8.30 P.M., on the subject of Non-suppurative Ankylosis of Joints. It is also intended to have an exhibition of specimens illustrating this subject. The discussion will be opened by Mr. William Anderson, and Mr. Howard Marsh, Mr. Davies-Colley, Dr. Griffiths, Mr. Bowlby, Mr. D'Arcy Power, Dr. Pye-Smith, Dr. Pasteur, and many other members of the society have signified their intention of taking part in it.

A PUBLIC meeting on behalf of the University College of Wales was held in Cardiff on Feb. 5th under the presidency of Lord Windsor, with a view to raise £20,000 required to meet conditional grants from the Treasury and the Drapers' Company in aid of the building fund of the college. Subscriptions amounting to £13,400 were promised, including one of £2500 from Lord Windsor.

ON Monday next, Feb. 17th, a dinner will be given in the Grosvenor Rooms of the Grand Hotel, Birmingham, to Sir Willoughby Wade in celebration of his recent knighthood.

WE understand that the subscription list to the Sir Joseph Lister Portrait Fund, to which a generous response has been made, will be closed shortly. Subscriptions may still be forwarded to Mr. Davies-Colley (Treasurer), 36, Harley-street, W., or to Mr. Bilton Pollard (Secretary), 24, Harley-street, W. It is proposed that the portrait, by Mr. Ouless, should be placed by the side of the portraits of Sir John Hunter and other great surgeons of the past in the rooms of the Royal College of Surgeons.

MR. GEORGE COWELL has retired from the surgeoncy of the Westminster and Royal Westminster Ophthalmic Hospitals after twenty-seven and twenty-five years' service respectively. He has been nominated to the post of consulting surgeon in both institutions. Mr. Cowell has also been elected one of the joint treasurers of the Royal Westminster Ophthalmic Hospital in the place of Mr. G. B. Hudson, M.P., resigned.

DR. NICOLSON, who has been appointed, as we have already announced, one of the Lord Chancellor's Visitors in Lunacy, was on Jan. 30th presented with a splendid silver punch-bowl by the officers and staff of Broadmoor Criminal Lunatic Asylum, the superintendency of which he now vacates.

AMONG the list of measures mentioned in the Queen's Speech is one for amending and consolidating the law relating to public health in Scotland and another for amending the law with respect to the supply of water to the metropolis.

THE Duke of Fife, the Earl of Durham, Lord Aldenham (Mr. Hucks Gibbs), and others, have signified their willingness to act as stewards in support of the Prince of Wales at the dinner to be held in May in aid of the funds of Guy's Hospital.

WE greatly regret to have to announce the death of Mr. A. T. Collum, M.B., F.R.C.S, which occurred on Feb. 12th in Charing-cross Hospital. The deceased, who was assistant surgeon to the hospital, died of septicæmia.

SIR JOHN WILLIAMS, Bart., M.D., has been appointed Physician-Accoucheur to H.R.H. the Duchess of York, and Dr. Robert W. Burnet has been appointed Physician-in-Ordinary to H.R.H. the Duke of York.

MR. W. S. COLMAN, M.D., M.R.C.P.Lond., has been appointed Assistant Physician to the National Hospital for the Paralysed and Epileptic, Queen-square, vice Dr. J. R. Bradford, F.R.S., resigned.

THE anniversary dinner of the Medical Society of London will be held in the Whitehall Rooms, Hôtel Métropole, on Saturday, March 7th.

PRESENTATIONS.—Dr. James Taylor of Belfast has been the recipient of a handsome gold watch for his instructive lectures on First Aid to the members of the Ladies' Ambulance Class at Belfast.—Mr. W. G. Grace, L.R.C.P. Edin., M.R.C.S., was last week entertained at dinner at the Clifton Club, the Duke of Beaufort presiding, when he was presented with a valuable gold watch, and a cheque representing the Gloucestershire contributions towards his testimonial fund, and Mrs. Grace was the recipient of a silver coffee kettle. The Gloucestershire county subscription towards the fund has closed at £1407 5s., and the authorities have joined the Marylebone Cricket Club in an investment sanctioned by both committees.

THOMAS WAKLEY,

THE FOUNDER OF "THE LANCET."

A BIOGRAPHY.[1]

CHAPTER VII.

The Action against the Hope Fire Assurance Company.—Payment in Full of Wakley's Claim.—Effects on his Future of the Outrages in Argyll-street.—An Unsettled Period.—The Inception of THE LANCET.

ON June 21st, 1821, the trial of the action of Wakley *v.* Barron and others, being an action to enforce the payment of a claim for loss by fire upon a policy underwritten by the defendants in their capacity of directors of the Hope Fire Assurance Company, was commenced in the Court of King's Bench before Lord Chief Justice Abbott, afterwards Lord Tenterden. Wakley's claim in detail was set out under the following heads:—Household goods, linen, wearing apparel, wines and liquors, printed books, and plate in his dwelling-house, £990; fixtures, £60; china and glass, £150—a total sum of £1200. Mr. Denman (afterwards Lord Chief Justice Denman), Mr. Curwood, and Mr. Adolphus were counsel for the plaintiff, while Mr. Marryat, Mr. Gurney, and Mr. F. Pollock (afterwards Chief Baron Pollock) were entrusted with the defence. Mr. Denman opened the case on the lines indicated by the depositions contained in Mr. Gardiner's pamphlet. He pointed out that the plaintiff was a young and successful man, the son of one wealthy man and the son-in-law of another, so that he could not be reasonably supposed to have been in urgent want of ready money. Yet no other motive could have been present, supposing him to have burned down his own house, for with his house and surgery went not only his practice but goods to the extent of £400 in excess of the sum for which he was insured—the smallest estimate of Wakley's loss being £1600, while the terms of his policy only allowed him to claim £1200. Counsel explained the doubling of the sum insured—which until May, 1820, had been only £600—at so short a period before the fire by pointing out that the increase was due to his client's marriage. Just before that event he had purchased furniture, plate, and china, and largely increased his wardrobe, while his wife had brought with her a great quantity of household linen, clothes, and other personal effects. Mr. Denman then read Wakley's sworn statement as to what had occurred on the evening of the fire, which was practically identical with his deposition in Mr. William Gardiner's pamphlet.[2] He concluded his opening speech, which was recognised in legal circles at the time as a very fine, lucid, and convincing piece of pleading, by saying that this statement, extraordinary as many of its details must appear, could not have been invented by the plaintiff for any motive; therefore the jury should receive it as a statement of the facts. The defendants, as trustees for others, must not be "discommended" for resisting the plaintiff's claim until the transaction was fairly and candidly sifted to the bottom. As he was able to prove every word of his opening statement he anticipated with confidence a verdict in his client's favour.

The following witnesses were then called: Mr. George Thompson, Wakley's next-door neighbour; Mr. Samuel Parker, his opposite neighbour, to whose house he was taken by Mr. Thompson after his escape from the burning house into that gentleman's premises; and Wakley's two servants. Their evidence was practically in accord with the sworn depositions previously published in Mr. Gardiner's pamphlet,[3] and remained unshaken upon cross-examination. It is, perhaps, advisable to remind the reader that the plaintiff himself in the year 1821 was not able to go into the witness-box on his own behalf, otherwise this elaborate support of Wakley's deposition would not perhaps have been needed.

Three very important witnesses were then called. Mr. Joseph Ashelford, an upholsterer, swore that the value of the furniture in 6, Argyll-street, a house, by the way, with a rental of £140, was £735. This does not seem a disproportionate sum when it is remembered that a rental of £140 in those days would be equivalent to one of £300 now, that the house was by no means small, and that much of its furniture had been purchased with the view of fitting it out for the reception of a bride—a period when some lavishness of expenditure is the universal rule. Mr. Samuel Malleson, from whom Wakley purchased the practice in Argyll-street and certain furniture, testified to the fact that the practice, when he was obliged through ill-health to sell it, was worth about £700 per annum. He had actually received £690 during the year 1818, his last year in full work and when he was already failing in health, this sum being exclusive of book debts. During the first seven months of 1819, i.e., the seven months preceding the transfer of the practice to Wakley, £560 had been received. Archdeacon Woollaston, the previous tenant of 6, Argyll-street, testified that he had sold certain furniture in Argyll-street for £300 to the plaintiff. Mr. Goodchild, the plaintiff's father-in-law, proved that he had given his daughter a trousseau of the value of £300 on her marriage. Certain patients were called to prove that Wakley had a good practice, as good as or better than his predecessor's connexion, and could have been in no want of ready money as they actually were his debtors for attendances, the accounts for which had not been rendered to them. A few of his personal friends and acquaintances testified to the fact that the house was originally handsomely furnished, and that marked additions to its contents were made at the time of the marriage. There was, in fact, general evidence that the young couple had started housekeeping with a profusion of plate, glass, and linen in a very comfortable, and even luxurious, home.

A statement was then made showing that the plaintiff had lost over £1600 in goods, vouchers for £1050 being forthcoming. The prices of some of the goods, as valued for Wakley by his solicitors, make curious reading nowadays, and certain of the articles of attire take us straight back to the heroes of "Pride and Prejudice" and the heroines of "Sense and Sensibility." A handsome 6 ft. by 7 ft. bedstead with mahogany carved and panelled feet, pillars, and brass castors; handsome chintz furniture with French draperies, lined with pink silk fringe, &c., new (£47 2*s.* 11*d.*), give an old-world flavour to the catalogue; and this sumptuous couch had further attached to it a straw palliasse (£2 10*s.*), a brocaded wool mattress in a brown holland case, ticked border (£6 6*s.*), and a prime goose-feather bed in a bordered tick and bolster and two pillows (£16 16*s.*). Seventy pounds in all for the bed in the front bedroom! Ten imitation rosewood cane-seat chairs with brass ornaments (£12 10*s.*) and ten horsehair cushions to same (£4 10*s.*), make us shudder a little for the prevalent taste in drawing-room upholstery; but a handsome polished steel fender and fire-irons (£12 12*s.*) remind us that if our ancestors paid heavily for the equipment of their fire-places they obtained in return beautiful and lasting metal-work and not the rubbish that most of us are putting up with at the other end of the century. A dozen forks and spoons priced at 28 guineas serve to remind us that silver was of account in those days, but four silver

[1] Chapters I., II., III., IV., V., and VI. were published in THE LANCET of Jan. 4th, 11th, 18th, and 25th, Feb. 1st and 8th respectively.

[2] THE LANCET, Feb. 8th, 1896, p. 373 et seq.

[3] Ibid.

candlesticks at £17 16*s.* might be a bargain at the price at the present moment, so beautiful was some of the more elaborate Georgian plate. The list of books that were burnt is interesting, as showing the bent of their owners' minds and also the fashion of the day with regard to gift-books. To Mrs. Wakley must be attributed a distinct taste for verse, for we feel sure that it was she who sustained the loss of Bloomfield's, Campbell's, Parnell's, Akenside's, Rowe's, Montgomery's, Shenstone's, Collins's, and "A Lady's" poems. The poems of Shakespeare, Burns, Milton, and Keats were probably her husband's, as certainly were "The Automaton Chess Games," "The Chess-player," "The Letters of Junius," Count Volney's "Ruins," the works of Cicero, and "The Castle of Otranto." Wakley's medical library was a large one for the time, for in 1820 there were not special monographs by numerous authors on every subject. He seems to have possessed many of the standard medical works of the day, and the total value of books destroyed by the fire was a little over £100. The wardrobe of the young couple was extensive. Wakley, who was all his life from youth upward a remarkably well and carefully dressed man, had twenty pairs of trousers of various sorts, including nankeens and Russian ducks; and among other quaint articles of attire he sets down the loss of six pairs of black silk gloves and of eight purple silk and seven green silk handkerchiefs. Mrs. Wakley's clothes were on a still more lavish scale. We find enumerated thirty-three dresses, *lingerie* in profusion, and quantities of lace, ribbons, shawls, and kerchiefs. A long embroidered white scarf is the identical article of attire without which the young woman in the steel frontispiece to the gift-books of the day was never depicted, but what a pair of purple morocco boots were like imagination fails to tell. Nor can we now clearly understand why the fantastic footgear should be only 12*s.* and the reasonable wrap £7 10*s.* The value of Wakley's clothes is set down in the statement of claim as £144 7*s.* 6*d.* and that of his wife's at £346 17*s.* The £1600, which the plaintiff claimed to have lost, was made up in the following way:—Furniture, £735 8*s.* 11*d.*; plate, £168 10*s.* 6*d.*; linen, £101 11*s.*; books, £104 3*s.* 6*d.*; china and glass, £163 14*s.* 2*d.*; Wakley's wardrobe, £144 7*s.* 6*d.*; and Mrs. Wakley's wardrobe, £346 17*s.*; making in all a total of £1764 12*s.* 7*d.* From this £100 was deducted as the estimated value of the salvage. None of the plaintiff's witnesses were seriously cross-examined, and hardly an attempt was made to shake the jury's confidence in either their *bona fides* or veracity.

The line of the defence was that the claim was a fraud, and that goods to the value specified had not been lost; but the suggestion that the house had been fired by any of its inhabitants was not hinted at. As a matter of fact this silly rumour had been so overwhelmingly refuted by Mr. Gardiner's pamphlet that the Hope Fire Assurance Company did not dare to put it forward at this stage, though they had used it as an argument wherewith to try to stave Wakley off further proceedings at an earlier stage. The first witness for the defendant was a watchman, who stated that he was at the door of the house when the servants came out, and that he heard the bolt go when the door was opened. This evidence was meant to contradict Wakley's story that he had opened the door to a false messenger from Gerard's Hall, and that being struck down at once he lay unconscious and could not have closed it again. It would also have to a certain extent disproved the theory that some of the property described by Wakley as having been in the house, but no trace of which, in spite of its imperishable nature, could be found by the firemen working under the appraisers for the Hope Office, had been removed by a robber or robbers. The tendency of this evidence, so directly at variance with Wakley's statement and the sworn testimony of four of his witnesses—viz., his two servants and Mr. Thompson and Mr. Parker—was to incriminate the servants, a side issue which, in view of the fact that they bore excellent characters and were still in Wakley's service, was pursued no further. The result of the evidence was to convict the watchman of not having watched. A Bow-street officer deposed to having taken down from Wakley's mouth a statement of the events of the night, and to having since received the clothes that he was wearing at the time of his escape from the burning house. This witness's examination was conducted with the assistance of a dummy attired in Wakley's clothes, the intent being to show that the cuts in the shirt, coat, and waistcoat did not tally with the cuts in the skin; but the evidence broke down under cross-examination. The only part of the Bow-street officer's testimony that really remained unrebutted was a repetition of Wakley's sworn statement, a more remarkable case of a witness being called to curse and remaining to bless not being often seen. The head fireman of the Hope Fire Assurance Company and one of the appraisers testified that they were unable to find traces of certain properties which were alleged in the plaintiff's statement of claim to have been present in the house at the time of the fire and which were from their nature more or less imperishable, and insinuated that some of the articles found had been overcharged against the company. Dr. Luke, who, it may be remembered, was the medical man who first saw Wakley after he had been conveyed across Argyll-street, deposed that the wounds could not have bled much, and would not have accounted for all the discolouration on his shirt. Some evidence as to the value of Mr. Samuel Malleson's furniture was also given by the owner of the house in Mill-street, where Malleson had resided while in practice, and whence certain of his furniture was transferred to Argyll-street when Wakley bought his practice. It appeared that a Mr. Comley rented the house after Malleson had left, and that he too in his turn had gone but had omitted to pay the rent. The owner of the house therefore distrained, and the broker through whom the distraint was made swore that he could only find £20 worth of furniture in the house. As it turned out, however, on cross-examination that the distraint was made after Wakley had removed some of or all the goods that he had bought into his new house the evidence went for nothing.

Mr. Parker was then recalled and proved that the plaintiff's hands were severely cut when he was brought into the house, and that the hæmorrhage from these cuts might easily have caused the excessive staining of the shirt that puzzled Dr. Luke; in making which point he incidentally confirmed Wakley's story that he had been compelled to break his way out of the burning building through a skylight.

The Lord Chief Justice summed up entirely in Wakley's favour, and the jury, after a delay of under half an hour, found for the plaintiff, damages £1200, or the full amount that he was able to claim under the terms of his policy. He also obtained his costs, which amounted to a sum of £281 10*s.*, and further costs not covered by that sum were defrayed by public subscription to which one, at least, of the jurymen subscribed, as well as the son of one of the auditors of the Hope Fire Assurance Company.[4]

Such was the satisfactory termination of a trial upon the issue of which hung the reputation and fortune of Thomas Wakley. He was paid in full, his name was also cleared in the most patent manner of the vile aspersions that had been showered upon it, while the public subscription to meet such of his costs as would otherwise have fallen upon himself constituted a public apology for the wrong that had been

[4] It may be interesting to say that we have now lying before us the actual formal "Record" in the action, consisting of many skins of parchment, and on the back of the last of these is endorsed the "Postea," signed by the proper officer of the court, which formed at that time the official statement of the result of the trial.

done him by rumour. But if the actual proceedings were now stayed, if his pecuniary loss was reduced to a small sum and his good repute before all men restored to him, the effects of the terrible experiences of the past ten months yet remained. And not only did they remain, but they changed the tenour of his life, forming the sharp stimulus that pricked him, from the regular routine of the life of a general practitioner into a course of more free and individual assertion. He had been personally attacked, he had won, and a not too latent spirit of combat had been roused. During his time of trial he had found his friends staunch and his professional brethren ready to repudiate for him the hard and evil things that were said of him. A few there were that had been unfaithful, but, on the whole, he was well and ably supported through the crisis. But when the strife of battle was over it left him an unsettled man, though there was nothing shiftless about his hesitation to embark again in private practice, and, surely, nothing hard to comprehend. He had prepared all things to live the life of a general practitioner of medicine. He had chosen his locality and furnished his house to that end. Through no fault of his own the house had been destroyed, while the ten months' neglect of his practice, which occurred again through no fault of his own, had well-nigh destroyed his connexion with his patients. It was necessary for him to start entirely afresh, and his reluctance to begin again the tasks of buying a practice, renting a house, furnishing it and insuring it, can be easily comprehended. What had been done a few months ago with the ardent solicitude of a young husband had now to be done over again by a disappointed man, who, though successful in obtaining his rights in a law court, had none the less been treated with physical and moral savagery, and had lain under undeserved stigma at the moment when he was most in need of sympathy. He was some months in settling down, during which time his letters are dated from such different parts of London as Kentish-town, Hatton-garden, and Little Chelsea, which was a colloquial name for the southern part of Brompton. He was at this time a poor man. He had little or no income. It is true he had his £1200, but it was necessary that he should reserve that, or as much of it as he was able, with a view to purchase a new practice and furnish another home. And in taking these steps he had more than ordinary reasons to be cautious. His father-in-law was a generous man and had stood by Wakley in his troubles well, but he was none the less a business man, and he resented the disappearance of the Argyll-street practice. He was just enough not to actually blame his son-in-law for the results of pure misfortune, but an able-bodied man out of employ was a sight that jarred on all his commercial instincts. Relations became strained between them, for which reason the young man felt that it was absolutely necessary that his next start should lead straight to success, recognising that failure was not going to be condoned. And this feeling of responsibility led to the months of hesitation.

It was during this time that Wakley made the acquaintance of, and matured friendship with, a man who was shortly to assist him in starting the work which afterwards became the chief business of his life—the work of medical reform. The link that bound William Cobbett and Thomas Wakley together originally was a quaint one. The Cato-street Conspiracy was a subject upon which all the papers in London wrote, and wrote persistently, and Wakley's name occurred more than once in the character of a victim to the blind brutality of Thistlewood's followers. Now it happened that William Cobbett, editor of the *Weekly Political Register* and the *Evening Post*, and accepted Parliamentary candidate for Coventry, firmly believed that he, too, had been destined to be a victim to this gang. He may himself have felt conscious of what many even among his admirers knew, that his Radicalism was more fervent in expression than thoroughgoing in policy, and he may have, therefore, suspected that his academic declamations of socialism would be more likely to irritate the mere ruffianly down-with-everything mob than would the declared opposition of the Tory. But for this reason or that Cobbett believed that the Cato-street conspirators had designs upon his life, and his belief, upon which he founded several articles in his evening paper, led him to make himself known to Wakley, a man in the same plight. Cobbett was exactly the man to make an impression upon Wakley, who, though not likely to be a blind follower of any leader, was receptive and ever willing to learn. He was thirty years Wakley's senior and had a life of chequered experiences behind him, having been gardener, private soldier, tutor in France and the United States, political pamphleteer and refugee, bookseller, and Radical journalist. He was an eloquent propagandist and a practical man in spite of the violent character of some of his political writing. In Cobbett's company Wakley met other journalists and men of the reforming type, and he saw how instinctively these men turned to pen and ink for the redress of any wrong. The acquaintanceship thus made ripened into a friendship which never waned, and there can be no doubt that although THE LANCET itself was entirely Wakley's idea Cobbett's friendship and Cobbett's example counted for much in his resolution, so soon now to be formally taken, to set the medical profession aright by publishing wherein it was wrong. What the reform of the political electorate was to Cobbett's pen, the reform of the profession of medicine was to be to the younger man's pen.

Two uneventful years had to go by, however, before any vague ideas that might already be in his head took definite shape. During these two years he practised his profession. After much desultory work here and there in the localities already mentioned he at last settled in practice at the north-east corner of Norfolk-street, Strand, where a good opportunity seemed to him to exist for making a lucrative livelihood. The practice was an old-established one, and the income good, but the class of patients was not the same as it had been in Argyll-street, nor was the neighbourhood so pleasant a one for residence. To Wakley these things did not matter so much as they did to his wife. He was satisfied to be doing good work, irrespectively of the class among whom it was done, and to be receiving enough money through his labours to sustain his household; but his wife did not like Norfolk-street or the fact that her husband was keeping a dispensary. So that in 1823 everything was ripe for THE LANCET. Wakley had gone through the fire of severe trials and had measured himself with big men, and felt that there had grown up within him the capacity to do big work. The abuses that Cobbett and his school were quick to spy out in the body political, but not always quick to persuade other people to see, were in the case of the medical profession bare to the casual eye. Nepotism was then rampant, ignorance was too often exalted, and pecuniary traffic determined success. The soul of the reformer had always been in Wakley, and to set aright these things he determined to take the field with a weekly newspaper devoted to the interests of the medical profession.

(To be continued.)

ROYAL STATISTICAL SOCIETY. — The fourth ordinary meeting of the present session will be held on Tuesday, Feb. 18th, at 5 P.M., at the Royal United Service Institution, Whitehall, S.W., when a paper will be read by Dr. Francis Warner on the following subject: "Mental and Physical Conditions among 50,000 Children seen in 1892-94, and the Methods of Studying Recorded Observations, with special reference to the Determination of the Causes of Mental Dulness and other Defects."

MEDICAL CERTIFICATES AND THE LONDON SCHOOL BOARD.

ON Feb. 6th a meeting was held in the rooms of the Royal Medical and Chirurgical Society, 20, Hanover-square, at which the following medical men were present: Dr. Thomas Bridgwater, Dr. J. Walter Carr, Mr. Brudenell Carter, Dr. H. P. Cholmeley, Dr. Ward Cousins, Mr. George Cowell, Mr. H. C. Fletcher, Dr. J. G. Glover. Dr. L. G. Glover, Dr. Leonard Guthrie, Dr. P. Horton-Smith, Dr. Raymond Johnson, Mr. David Keele, Mr. Miller, Mr. Malcolm Morris, Mr. Marmaduke Sheild, Dr. Walter Smith, Dr. Vinrace, Mr. Spencer Watson, and Dr. C. Percival White.

The object of the meeting was to discuss the conduct of the School Board as expressed by its resolution of May 30th, 1895, upon which we commented severely in our issue of June 8th.

Dr. GLOVER, having been unanimously elected chairman, briefly reviewed the history of the question which had led to the present meeting. The School Board had appointed officers in some parts of London to supervise medical certificates considered doubtful by the divisional superintendents. This was an offensive way of going behind the certificate of the medical man. He pointed out that certificates were given on a very large scale, and in the case of some hospitals the certificates were not confined to the children but were also given gratuitously to candidates for the office of teacher. He asked where this gratuitous system was to end, and many would see in the present question part of the great general evil of the gratuitous system. The medical profession had pretty well been demoralised by it, and they were going far to demoralise other professions. He asked them to bear in mind the question of payment, but the chief object for which they had met was to get rid of the offensive action of the School Board. He reminded them that the question was of greater moment than professional etiquette; it was a question affecting the safety of the public. When the responsibility of giving a certificate as to whether a child was suffering from an infectious disease or not was considered it would be seen that the question became a public one. He felt that when the Board raised an objection to a certificate it should treat with respect the medical man giving that certificate and put its own officer in communication with the medical man, who should be paid for his trouble. That he thought a reasonable suggestion. Mr. Sharp had only a very small majority to rely upon, and when the question was last raised at the Board it was only carried by a majority of two, and he hoped they would have no difficulty in carrying that majority to the other side.

Dr. WARD COUSINS then proposed the following resolution:—

"That this meeting of medical men interested in the question of the certification of sickness in School Board children in the metropolis, and largely representing those who have to give certificates, expresses great dissatisfaction and concern at the recent action of the Board in appointing medical men in some parts of London to go behind the certificates supplied to the Board, with much trouble, by practitioners."

The profession, he said, had really a very great cause for complaint. If the certificates were of no value they could refuse to give them, and they had a right to do so if their certificates were ignored.

Mr. COWELL seconded the resolution, which he said exactly expressed the feeling of the meeting. The School Board was indebted to the medical profession in a greater degree than it knew of, and medical men should be treated by it with respect and courtesy. Since the resolution was passed he had declined to give certificates altogether. They should take the matter into their own hands, and if the School Board found the profession unwilling to grant certificates so long as they were treated in a disrespectful manner they would find that the Board would rescind its resolution.

Mr. SPENCER WATSON and Mr. MALCOLM MORRIS also spoke to the resolution.

Mr. SHEILD pointed out the inducement, under the system of payment by results to the schoolmaster, to ignore the medical certificate to keep up his returns.

The resolution was then carried unanimously.

On the motion of Dr. WALTER SMITH, seconded by Mr. MALCOLM MORRIS, the following resolution was also carried unanimously:—

"That we are of opinion that, in the interest of the health of school children under the School Board system, it is of vital importance that harmonious action should exist between the medical profession and the Board; and that, failing this, the health of individual children will suffer greatly, and one chief defence against the spread of scarlet fever, diphtheria, skin diseases, and other complaints will be impaired."

Finally it was resolved that the following gentlemen should constitute a committee to consider the question, draw up a line of action, and report to a future meeting: Mr. Malcolm Morris, Dr. Raymond Johnson, Dr. Guthrie, Mr. Marmaduke Sheild, Dr. Walter Smith, Mr. Cowell, Dr. Bridgwater, Dr. H. P. Cholmeley, and Dr. Glover (chairman).

STATISTICAL REPORT OF THE HEALTH OF THE NAVY FOR THE YEAR 1895.

WE purposely delayed noticing the report of the health of the navy for 1894 until we had time to give something more than a hurried glance at its pages, but we do not know that we have gained much by doing so. The report is mainly—indeed, almost entirely—statistical, and all that can consequently be done is to briefly summarise its facts and figures, and the compilers of the report have done this in a way that leaves but little room for alteration or addition. The total force in the service afloat in 1894 was 64,840 officers and men, of whom 58·92 per cent. were between the ages of fifteen and twenty-five and 29·56 per cent. between twenty-five and thirty-five years of age, the remainder ranging between the ages of thirty-five and forty-five years of age and upwards. The returns of the total force are very satisfactory. The number of cases of disease and injury for the year shows a lower ratio than any during the previous thirty-eight years; the ratio of invaliding is also lower than any recorded since 1856, with the exception of those of 1888 and 1889; and the death-rate compares favourably with the rates of former years, although it has, owing to casualties arising from the operations of naval forces in expeditions on the west coast of Africa, somewhat increased. The general health, we are told, of the squadron on the Mediterranean station has undergone considerable improvement notwithstanding an increased number of cases of malarial fever. The China station shows a large reduction of sickness as compared with 1893, and no cases of bubonic fever occurred among the officers or men of the fleet during the outbreak of that disease at Hong-Kong. The ratio of venereal diseases per 1000 shows an increase of cases of primary syphilis, and, as compared with the figures of the previous seven years, there is also an increase of secondary syphilis, although this form of the disease shows a slight decrease in 1894 as compared with 1893.

The ratio of cases of disease and injury per 1000 of the total force for 1894 is 919·2, being a decrease of 35·22 and of 62·47 per 1000 on that of the previous year and on the average ratio for the past seven years respectively. The daily sick ratio, which also shows a decrease, was 39·55 per 1000. The invaliding rate—25·61—and the death-rate—5·76 per 1000—were both less in 1894 than in the previous year, or as compared with the average rates for the past seven years. The lowest sick-rate was on the North American and West Indian station, and the highest on the China station.

Among the fevers it may be mentioned that 2042 cases of simple continued fever were returned, 531 of which occurred on the Mediterranean, 404 on the East Indies, 249 on the China, and 142 on the Cape of Good Hope, and West Coast of Africa stations. Out of a total of 145 entries for enteric fever during the year 63 occurred on the home station, 26 on the Mediterranean, 9 on the East Indies, 17 on the China stations, and the remainder at other stations and in the irregular force; indeed, cases of this disease seem to have occurred at all the stations of the British fleet. The total number of deaths was 31 and the invalidings 12 from this fever. There were 2 cases of yellow fever recorded on the south-east coast of America station. Out of 71 cases of dysentery returned in 1894, 9 proved fatal, and 9 were invalided. Influenza caused 1575 admissions and 2 deaths; the disease was, geographically regarded, widely spread. All the cases of diphtheria, of which 8 were returned, occurred, with one exception, in the irregular force.

As regards venereal diseases, amounting to a total of 9719 cases, there were 3419 of primary syphilis, 1656 of secondary syphilis, and 4644 of gonorrhœa and its sequelæ.

The number invalided for these diseases was 186, and there were 3 deaths; 5172 of the total cases are recorded in the home station. The ratio for primary syphilis was 52·72 per 1000, which shows an increase of 1·06 per 1000, while that for secondary syphilis equals 25·53, being a decrease of 0·96 per 1000 as compared with 1893. As compared with the ratios of the last seven years there was a diminution of 3·66 per 1000 under primary, but an increment of 1·2 per 1000 under secondary syphilis. The returns from the following stations show increases in the ratio of primary syphilis—viz.: the Home Station, of 2·26 per 1000; the South East Coast of America, of 8·33; the Pacific, of 11·11; the Australian, of 10·55; and in the Irregular Force, of 2·0. Decreases, however, are seen in the Mediterranean Station, of 1·32; North American and West Indian, of 3·12; Cape of Good Hope and West Coast of Africa, 4·37; the East Indies, 0·68; and China, 4·21. The invaliding ratio of the total Force for secondary syphilis was 1·91 per 1000, a decrease of 0·35 per 1000 when compared with 1883. These facts and figures tell a sad story when their results are considered and all the consequences of this disease—from its initial stage to its remote effects—are taken into account.

Under the head of malarial fevers occurring on the Mediterranean Station we find that the largest number of cases of remittent fever (69) was returned by H.M.S. *Anson*, then came the *Hood* with 57, the *Vulcan* with 39, the *Ramillies* with 37, the *Collingwood* with 29, and the *Arethusa* and *Trafalgar* with slightly smaller numbers. The great majority of the patients appear to have contracted the fever at Malta. The disease was characterised by a great liability to relapse and by the frequent occurrence of rheumatism as a troublesome sequela. The remaining patients were distributed throughout twenty-six ships, but many of them were attacked at Malta, which occupies an unenviable position in this respect. The nomenclature of Mediterranean fevers is confessedly somewhat confused and unsatisfactory. As regards many of them, it is at any rate still open to doubt whether they can be correctly designated as malarial. The remarks of Surgeon W. E. Marshall and of Staff-Surgeon Gilbert Kirker, M.D., on this subject given at p. 43 *et seq.* of the report are well worth reading. It is generally recognised to be very difficult to distinguish certain forms of fever prevailing in tropical and sub-tropical countries from enteric fever, especially at an early stage of the disease, still there is a disease encountered all along the Mediterranean littoral which certainly does not seem to be typhoid fever on the one hand, or to be demonstrably attributable, on the other, to malaria as that term is usually understood. Ague is a relatively rare disease to be contracted at Malta or Gibraltar, but a continued or remittent form of fever which is not at all amenable to the action of quinine, and not conformable in its clinical or pathological features to enteric fever—although that disease is, of course, frequently met with—is common at both stations. It is apt to be followed by a long and tedious convalescence, interrupted by febrile relapses and very frequently by sequelæ not ordinarily met with after attacks of enteric fever. Staff-Surgeon Kirker does not seem to think that the prevalence of this form of fever in the fleet at Malta is attributable to any foul state of the water in those harbours as has been suggested, and he gives some pertinent reasons for his opinion.

In the section of the report devoted to the Cape of Good Hope and West Coast of Africa stations there are some good remarks on the widespread prevalence of small-pox and the protective influence of vaccination. There are also some excellent extracts from the reports of naval medical officers on the intermittent and remittent climatic fevers of the West Coast of Africa, which may be read with special interest at the present time.

In conclusion, we may express the wish that these annual volumes of statistical reports on the health of the navy contained far more matter than they do on these and other subjects of professional interest.

THE ASHANTI EXPEDITION.

WHEN we last wrote the total number of sick of the force was about 120, but we specially warned our readers that it would be too much to expect that the relatively small number of sick at that time could be taken as the limit and measure of the inefficiency that would arise from service in that climate—fresh manifestations of malarial disease would almost certainly occur later. This prediction has, unfortunately, only proved to be too correct, for within a day or two afterwards we learnt from Cape Coast Castle that the number of sick had risen to nearly 200. Later intelligence has arrived that the British force has embarked for, and is now on its way to, this country in the *Manila* and other steamers, the hospital ship *Coromandel* conveying the sick of the expeditionary force, with Sir Francis Scott, Prince Christian Victor, and the Headquarters Staff. This brings, we may hope, the Ashanti Expedition to a close, and our object has been attained without any bloodshed. In design and arrangement the expedition has been well conceived and admirably managed, and we trust that the hard and successful labours of the troops, and the risks to life which they have had to encounter will not be overlooked by the Government. There will probably be some increase in the number of the sick on the homeward voyage, and we may expect that opportunities will not be wanting to histologists in this country for searching for the presence of Laveran's malaria parasite in the blood of some of those who have contracted climatic fever in West Africa. Now that the sufferers have left that climate, and will soon have returned to one free from malaria, it may be fairly anticipated that, with the aid of anti-malarial remedies like quinine, they will all recover their health, although the recovery in some instances may be somewhat protracted from the liability to recurrent attacks and to the sequelæ of malarial disease.

What seems to us to be now required for the peaceful development of Ashanti is some light railway communication and telegraph between Kumasi and the coast, a British residency in the Ashanti capital, and the selection of some healthy and elevated site in its vicinity for the occupation of the troops. We may confidently expect that there will then be an end to the massacres and tribal wars.

THE GRAND PRIORY OF THE ORDER OF THE HOSPITAL OF ST. JOHN OF JERUSALEM IN ENGLAND.

AT a public dinner, largely attended by medical men, one of the guests wore the insignia of the above Order, an eight-pointed or Maltese cross of white enamel, embellished alternately at each of the principal angles with a lion gardant and a unicorn both passant, and inquiry was made by many of the assembled guests as to the meaning of the badge. That the Order whose motto is *Pro utilitate hominum* should not be more generally known throughout the profession than this incident would seem to imply somewhat surprises us, and we therefore make the following abstract from a pamphlet issued by the St. John Ambulance Association, which, besides containing a lecture on the advantages of ambulance instruction and detailed information of the work of the Association, gives a good *résumé* of the history of the Order of the Hospital of St. John of Jerusalem in England and its departments. The pamphlet can be obtained on application to the secretary of the Order, St. John's-gate, Clerkenwell, London, E.C.

The Order of St. John of Jerusalem was founded in the city of its patron saint, where it established an hospital. It afterwards migrated to Rhodes, and after many wanderings to Malta. Its primary object was the defence and relief of pilgrims visiting the Holy City, and the confraternity soon became incorporated by charter of the Kings of Jerusalem. In England a branch of the Order was introduced (circa) 1100, with its headquarters at Clerkenwell, and attained the status of an English corporation under the style of the Order of St. John of Jerusalem in England about the time of Edward II. A representative from the English branch was sent to the main body of the Order at its sovereign seat. In or about the year 1330 the Order was divided into eight separate languages or nationalities, England occupying the sixth place, and held its high position in this country until about the year 1540, when the English corporate body was dissolved by Henry VIII. Shortly after the advent of Queen Mary to the throne, however, the English Knights were re-established at the Priory of Clerkenwell as a confraternity, and in the year 1557 were again incorporated by Royal Charter. About the year 1827 the Order was revived in England, and since 1830 its members have united together as an Order or Fraternity for the purpose of performing Hospitalier and other charitable work. On May 14th, 1888, in recognition of the excellent work performed by the members of the Order or Fraternity during the past half-century—especially the establishment of the St. John Ambulance Association and the foundation and support of the British Ophthalmic Hospital at Jerusalem—Her Majesty the Queen granted to them a new Royal Charter

of Incorporation by their old name and style of "The Grand Priory of the Order of the Hospital of St. John of Jerusalem in England." Her Majesty became the Sovereign Head and Patron of the Order. The members then existing on the roll of the Fraternity at the date of the incorporation formed the body corporate of the then incorporated Order or Fraternity, amongst whom, as Knights of Justice, were the Duke of Connaught, the Duke of Teck, and many others of high rank and distinction. Amongst the Ladies of Justice were the Princess of Wales and many other members of the Royal Family, and amongst the Honorary Ladies of Justice were the Queen of Denmark and the Queen of Sweden and Norway, and the Grand Duchess of Baden. The existing Prior of the Order or Fraternity, the Duke of Manchester, K.P., was created the Grand Prior of the Order thus reincorporated, until the Eve of St. John the Baptist next following the date of the Royal Charter, when the Prince of Wales became Grand Prior, and deputed his eldest son, Prince Albert Victor as Sub-Prior, on whose lamented death the Duke of York was appointed to that grade.

The various grades of the Order which do not confer any rank, style, title, dignity, appellation, or social precedence whatsoever, are as follows:—A Grand Prior, a Sub-Prior, a Titular Bailiff of Eglé, Honorary Bailiffs, Commanders, Honorary Commanders, Knights of Justice, Ladies of Justice, Prelates, Sub-Prelates, Chaplains, Knights of Grace, Ladies of Grace, Esquires, Serving Brothers and Sisters—with whom are associated, but not as members, Honorary Associates and Donats.

In addition to the British Ophthalmic Hospital at Jerusalem and the St. John Ambulance Association, the following movements have been supported or established by the Chapter during the present century:—The relief of poor convalescents, recommended by hospitals and infirmaries, by the issue of diet and nourishing food; the promotion of cottage hospitals in country districts; a system of transport for the injured, by means of ambulance stations, where suitable litters were deposited; the initiation of what became known as "The National Society for Aid to Sick and Wounded in War," for the relief of both combatants during the Franco-German campaign; "The Eastern War Sick and Wounded Relief Fund,' for the same purpose during the Russo-Servian War; and the award of medals and diplomas for deeds of gallantry in saving life on land. The Order has also taken part in the promotion of other useful institutions, such as the Metropolitan and National Society for Training and Supplying Nurses for the Sick Poor and the Victoria Hospital, Cairo, and has afforded relief to the sick and wounded of our own armies in some of their recent campaigns. The St. John Ambulance Association department of the Order was originally established in 1878 for affording instruction in the preliminary treatment of the injured in peace and the sick and wounded in war. The object of the Association is not to rival but to aid the medical man, and the subject matter of instruction given at the classes has been defined by the Medical Committee of the Ambulance Department with the view of qualifying the pupil to adopt such measures as may be advantageous pending the doctor's arrival or during the intervals between his visits. In connexion with this Association is the St. John Ambulance Brigade.

The objects of the St. John Ambulance Brigade are: (*a*) To afford holders of First Aid Certificates from the St. John Ambulance Association opportunities of meeting together for ambulance practice, and thus to combine individual efforts for the public advantage. (*b*) To render First Aid to the injured on public occasions, with the sanction of the police and other authorities, and to maintain in readiness for such duty a body of trained men qualified so to act. (*c*) To enrol a body of civilians qualified in First Aid and trained in ambulance drill willing to be placed at the disposal of the military and other authorities as a supplement to the regular medical staff in case of necessity either at home or abroad. (*d*) To supplement the *personnel* of the Invalid Transport Service at St. John's-gate, and thus afford opportunities of training men in ambulance duties, and generally to develop and promote every means of rendering aid to the injured.

THE CASE OF MR. LIONEL SMITH.

THE following donations additional to the £83 17*s.* 6*d.* sent to THE LANCET, and already acknowledged, have been received by us:—

Mr. D. Elcum	£1	1	0
Mr. R. Lawford Knaggs	1	1	0
Dr. T. Langston	1	0	0
Dr. Druce Slater	1	1	0

THE annual general meeting of the governors of the Royal National Hospital for Consumption and Diseases of the Chest, Ventnor, was held at the London Office, 34, Craven-street, Charing-cross, on Feb. 13th.

THE BURROUGHS SCHOLARSHIP.—At an evening meeting of the Pharmaceutical Society of Great Britain on Tuesday last, Mr. Michael Carteighe, the President, in the chair, the subscriptions raised by the friends of the late Mr. S. M. Burroughs to perpetuate his name and his practical philanthropy were handed over to the council of the Pharmaceutical Society. The sum, which has been placed under the trusteeship of the council, amounts to £850, and, as is only fitting, a scholarship has been founded in connexion with the subjects in which Mr. Burroughs was educated and the calling which he followed. This scholarship, which is to be called the Burroughs Scholarship, will be the means of enabling a student of exceptional merit to make further research in the subject of pharmacy.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Enteric Fever at High Wycombe, by Dr. S. W. WHEATON.—High Wycombe became the subject of a visit by one of the medical inspectors of the Local Government Board by reason of an excess of enteric fever. The town lies mainly on a bed of gravel in the valley of the small river Wye, and the description of a large portion of its water-supply is characteristic of that which obtains where enteric fever is common. Perhaps it is less common in High Wycombe than it otherwise would be by reason of the abundance of the water flowing through the gravel and the consequent dilution of its contained filth. There are waterworks, but the domestic water-supply comes mainly from wells, and many of these are mere dip-wells, sunk in the gravel, and not protected from outside soakage. Watercloset soil-pipes, frequently blocked, pass by these wells, so also do drains the joints of which are not usually cemented; then, again, gullies are close to, or over, the wells so as to favour the entrance of liquid refuse into the drinking-water; and, lastly, after heavy rainfall sewage is forced up the manholes in low-lying parts of the town and carried over the surface of the pervious soil in which the wells are sunk. Well may the opinion be expressed that such a water-supply is unsatisfactory. But there is also blockage of the main sewers themselves with facility for soakage through gravel or fissures in the chalk into the water-bearing strata. The waterworks water seems mainly used for other than domestic purposes, such as street-watering, &c. We do not propose to follow Dr. Wheaton further in his description of the sanitary circumstances of this ancient borough. But as regards enteric fever it appears that it is rarely absent from among its 10,000 to 11,000 people and that in 1894-95 some 50 attacks occurred. In seeking a cause of this fever Dr. Wheaton was in difficulty by reason of the fact that the unwholesome conditions found in the invaded houses were so numerous that it seemed impracticable to single out any one of them as responsible for the disease. He gives instances of this in support of his contention; but one unwholesome condition common to all the houses in question was the want of a supply of water for flushing the closets. The need of insisting that an elementary condition of a watercloset is a proper supply of water for flushing seems an anomaly at the present date, and yet the fact is evidently not appreciated in High Wycombe. Then, again, the town council seem desirous to remain in ignorance of the precise amount and localisation of infectious disease in their district, for they have not adopted the notification of infectious diseases, and they have no means of isolating any sick of whom they may hear or for the efficient disinfection of infected articles. There is evidently much to do in High Wycombe before it can be held that even the elementary requirements of a healthy town have been provided; and it is to be hoped that the town council will not wait until some more serious prevalence of disease is brought about before removing from their midst those conditions which obviously involve risk of danger, and before providing themselves adequately with the means of controlling any infectious disease that may appear within their borough.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns 6466 births and 4267 deaths were registered during the week ending Feb. 8th. The annual rate of mortality in these towns, which had declined in the three preceding weeks from 19·7 to 18·4 per 1000, rose again last week to 20·5. In London the rate was 20·7 per 1000, while it averaged 20·3 in the thirty-two provincial towns. The lowest rates in these towns were 15·0 in Croydon, 15·3 in Swansea and in Blackburn, 15·6 in Huddersfield, and 16·2 in Birkenhead; the highest rates were 24·2 in Halifax, 24·7 in Wolverhampton, 25·2 in Liverpool, 25·4 in Norwich, and 26·9 in Bolton. The 4267

deaths included 561 which were referred to the principal zymotic diseases, against 492 and 457 in the two preceding weeks; of these, 204 resulted from whooping-cough, 149 from measles, 97 from diphtheria, 44 from scarlet fever, 42 from diarrhœa, 33 from "fever" (principally enteric), and 1 from small-pox. No fatal case of any of these diseases was recorded in Plymouth; in the other towns they caused the lowest death-rates in Croydon, Hull, Birkenhead, Swansea, and Bradford, and the highest rates in Birmingham, Burnley, Salford, Norwich, and Bolton. The greatest mortality from measles occurred in Salford, Birmingham, Burnley, Leicester, and Norwich; from whooping-cough in Portsmouth, Manchester, Salford, Bolton, Sheffield, and Gateshead; and from "fever" in Bolton. The mortality from scarlet fever showed no marked excess in any of the large towns. The 97 deaths from diphtheria included 63 in London, 5 in West Ham, and 5 in Birmingham. One fatal case of small-pox was registered in Swansea, but not one in London or in any other of the thirty-three large towns. There were 64 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 8th inst., against 73, 70, and 74 at the end of the three preceding weeks; 6 new cases were admitted during the week, against 17, 14, and 12 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2883, against 2883, 2916, and 2879 on the three preceding Saturdays; 285 new cases were admitted during the week, against 280, 290, and 273 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had increased in the five preceding weeks from 314 to 366, further rose to 446 last week, but were 35 below the corrected average. The causes of 71, or 1·7 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Cardiff, Bradford, Newcastle-upon-Tyne, and in nine other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Derby, Sheffield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·0 and 19·5 per 1000 in the two preceding weeks, further declined to 18·8 during the week ending Feb. 8th, and was 1·7 per 1000 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 9·8 in Leith and 12·0 in Perth to 21·8 in Aberdeen and 25·7 in Paisley. The 548 deaths in these towns included 32 which were referred to whooping-cough, 17 to diarrhœa, 10 to diphtheria, 8 to "fever," 6 to scarlet fever, 4 to measles, and not one to small-pox. In all, 77 deaths resulted from these principal zymotic diseases, against 59 and 79 in the two preceding weeks. These 77 deaths were equal to an annual rate of 2·6 per 1000, which was slightly below the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of whooping-cough, which had been 29 and 37 in the two preceding weeks, declined to 32 last week, of which 17 occurred in Glasgow, 7 in Aberdeen, and 4 in Dundee. The deaths referred to different forms of "fever," which had been 3 and 7 in the two preceding weeks, further rose to 8 last week, and included 5 in Glasgow. The fatal cases of diphtheria which had increased from 2 to 6 in the four preceding weeks, further rose to 10 last week, of which 4 occurred in Aberdeen, 3 in Edinburgh, and 2 in Glasgow. The deaths from scarlet fever, which had been 3 and 10 in the two preceding weeks, declined to 6 last week, and included 3 in Glasgow and 2 in Leith. Of the four fatal cases of measles 2 were recorded in Greenock and 2 in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 142 and 116 in the two preceding weeks, further declined to 106 last week, and were 108 below the number in the corresponding period of last year. The causes of 24, or more than 5 per cent. of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 27·4 and 28·5 per 1000 in the two preceding weeks, further declined to 24·6 during the week ending Feb. 8th. During the past six weeks of the current quarter the death-rate in the city has averaged 26·4 per 1000, the rate during the same period being 19·1 in London and 16·5 in Edinburgh. The 165 deaths registered in Dublin during the week under notice showed a decline of 13 from the number in the preceding week, and included 10 which were referred to the principal zymotic diseases, against 11 and 7 in the two preceding weeks; of these, 5 resulted from diarrhœa, 2 from "fever," 2 from whooping-cough, and 1 from scarlet fever, but not one either from small-pox, measles, or diphtheria. These 10 deaths were equal to an annual rate of 1·5 per 1000, the zymotic death-rate during the same period being 3·3 in London and 0·8 in Edinburgh. The 5 fatal cases of diarrhœa exceeded the number recorded in any recent week. The deaths referred to different forms of "fever," which had been 6 and 3 in the two preceding weeks, further declined to 2 last week. The mortality both from scarlet fever and from whooping-cough corresponded with that recorded in the preceding week. The 165 deaths in Dublin last week included 29 of infants under one year of age, and 40 of persons aged upwards of sixty years; the deaths of infants showed a slight increase, while those of elderly persons showed a further decline from recent weekly numbers. Four inquest cases and 4 deaths from violence were registered; and 60, or more than a third, of the deaths occurred in public institutions. The causes of 10, or more than 6 per cent., of the deaths in the city last week were not certified.

VITAL STATISTICS OF LONDON DURING JANUARY, 1896.

In the accompanying table will be found summarised complete statistics relating to sickness and mortality during January in each of the forty-three sanitary areas of London. With regard to the notified cases of infectious disease in the metropolis during last month, it appears that the number of persons reported to be suffering from one or other of the nine diseases specified in the table was equal to 10·3 per 1000 of the population, estimated at 4,435,955 persons in the middle of this year. In the three preceding months the rates had been 14·5, 13·7, and 11·5 per 1000 respectively. Among the various sanitary areas the rates were considerably below the average in St. George Hanover-square, Holborn, St. Saviour Southwark, St. George Southwark, Wandsworth, and Woolwich; while they showed the largest excess in Stoke Newington, Whitechapel, St. George-in-the-East, Mile End Old Town, Poplar, Rotherhithe, and Plumstead. The prevalence of small-pox in London showed a slight increase during January, the 50 cases notified during the month including 7 in Greenwich, 6 in Poplar, 5 in Rotherhithe, 4 in Kensington, 4 in Lambeth, and 3 in Bermondsey sanitary areas. The Metropolitan Asylum Hospitals contained 68 small-pox patients at the end of January, against 103, 73, and 75 at the end of the three preceding months; the weekly admissions averaged 13, against 15 and 13 in the two preceding months. The prevalence of scarlet fever in London showed a further decline during January; this disease was proportionally most prevalent in Strand, Whitechapel, St. George-in-the-East, Poplar, St. Olave Southwark, Rotherhithe, and Battersea sanitary areas. The Metropolitan Asylum Hospitals contained 2814 scarlet fever patients at the end of January, against 2727, 2690, and 2708 at the end of the three preceding months; the weekly admissions averaged 282, against 263, 304, and 250 in the three preceding months. The prevalence of diphtheria in London during January showed a slight further decline from that recorded in recent months; among the various sanitary areas this disease showed the highest proportional prevalence in Fulham, Chelsea, City of London, St. George-in-the-East, Mile End Old Town, Greenwich, and Plumstead. There were 682 diphtheria patients under treatment in the Metropolitan Asylum Hospitals at the end of January, against 661, 672, and 687 at the end of the three preceding months; the weekly admissions averaged 103, against 103, 98, and 99 in the three preceding months. The prevalence of enteric fever in London during January showed a further marked decline from that recorded in the two preceding months; this disease was proportionally most prevalent in Hackney, St. Martin-in-the-Fields, Clerkenwell, St. Luke, St. George-in-the-East, Poplar, and Rotherhithe

ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON—JANUARY, 1896.

(Specially compiled for THE LANCET.)

Sanitary Areas.	Estimated population in the middle of 1896.	Notified Cases of Infectious Disease.										Deaths from Principal Infectious Diseases.										Deaths from all causes.	Death-rate per 1000 living.	Deaths of infants under one year to 1000 births.
		Small-pox.	Scarlet fever.	Diphtheria.*	Typhus fever.	Enteric fever.	Other continued fevers.	Puerperal fever.	Erysipelas.	Cholera.	Total.	Annual rate per 1000 persons living.	Small-pox.	Measles.	Scarlet fever.	Diphtheria.†	Whooping-cough.	Typhus fever.	Enteric fever.	Other continued fevers.	Diarrhœa.	Total.	Annual rate per 1000 persons living.			
LONDON...	4,435,955	50	2075	1284	—	337	11	31	599	—	4387	10·3	3	418	120	285	266	—	65	2	51	1210	2·8	7837	18·4	137
West Districts.																										
Paddington	123,942	1	66	27	—	7	1	3	10	—	115	9·7	—	3	5	8	2	—	3	1	—	22	1·9	175	14·7	134
Kensington	167,993	4	96	35	—	8	1	—	22	—	166	10·3	—	8	6	7	7	—	2	—	—	30	1·9	273	17·0	132
Hammersmith	111,246	2	59	32	—	4	1	—	8	—	106	9·9	—	12	6	8	15	—	3	—	2	46	4·3	197	18·5	170
Fulham	124,029	—	30	58	—	2	—	1	7	—	98	8·2	—	8	4	15	15	—	—	—	4	46	3·9	207	17·4	130
Chelsea	100,815	—	32	47	—	5	—	—	17	—	101	10·4	—	1	2	14	6	—	1	—	1	25	2·6	165	17·1	98
St. George Hanover-square	73,054	—	25	15	—	6	—	—	5	—	51	7·3	—	8	—	1	5	—	1	—	1	16	2·3	118	16·9	174
Westminster	53,595	1	26	13	—	1	—	—	10	—	51	9·9	—	4	1	4	5	—	1	—	—	15	2·9	97	18·9	175
St. James Westminster	22,735	—	12	3	—	2	—	—	4	—	21	9·6	—	9	1	1	—	—	1	—	—	12	5·5	42	19·3	161
North Districts.																										
Marylebone	136,239	—	49	32	—	15	—	1	20	—	117	9·0	—	26	2	9	9	—	3	—	1	50	3·8	278	21·3	117
Hampstead	79,831	—	34	35	—	5	—	1	10	—	85	11·1	—	16	1	6	1	—	2	—	2	28	3·7	107	14·0	195
St. Pancras	233,347	—	106	45	—	21	—	2	35	—	209	9·3	—	29	7	6	5	—	—	—	4	51	2·3	398	17·8	170
Islington	340,007	2	133	73	—	19	—	1	43	—	271	8·3	—	48	5	20	20	—	7	—	3	103	3·2	603	18·5	134
Stoke Newington	36,329	2	27	7	—	4	—	—	5	—	45	12·9	—	—	1	3	—	—	1	—	—	5	1·4	35	10·0	67
Hackney	219,834	—	123	64	—	36	3	—	26	—	252	12·0	—	2	4	14	17	—	3	—	—	40	1·9	293	13·9	98
Central Districts.																										
St. Giles	37,170	—	13	12	—	1	—	—	5	—	31	8·7	—	3	—	1	2	—	—	—	1	7	2·0	71	19·9	178
St. Martin-in-the-Fields	13,294	—	6	1	—	5	—	—	2	—	14	11·0	—	—	—	—	—	—	—	—	—	—	—	12	9·4	—
Strand	22,008	—	17	4	—	2	—	1	—	—	24	11·4	—	1	3	1	1	—	—	—	6	12	2·8	63	29·9	153
Holborn	31,940	—	11	6	—	—	—	—	2	—	19	6·2	—	5	—	2	3	—	—	—	1	11	3·6	81	26·4	202
Clerkenwell	64,762	1	30	15	—	11	—	—	8	—	65	10·5	—	10	4	4	—	—	1	—	2	21	3·4	113	18·2	133
St. Luke	40,362	2	14	12	—	6	—	—	13	—	47	12·1	—	—	3	4	6	—	—	—	1	14	3·6	89	23·0	114
City of London	32,845	1	9	16	—	4	—	—	—	—	30	9·5	—	—	1	1	—	—	4	—	—	6	1·9	62	19·7	89
East Districts.																										
Shoreditch	122 678	1	63	30	—	10	—	1	26	—	131	11·1	1	4	5	8	20	—	1	—	—	39	3·3	255	21·7	167
Bethnal Green	130,282	—	73	38	—	13	1	1	26	—	151	12·1	—	17	5	14	18	—	4	1	1	60	4·8	316	25·3	165
Whitechapel	76,143	2	49	30	—	8	—	—	16	—	105	14·4	—	2	2	7	4	—	2	—	2	19	2·6	156	21·4	115
St. George-in-the-East	45,036	1	48	20	—	6	1	—	2	—	78	18·0	—	—	3	4	—	—	1	—	3	11	2·5	116	26·8	144
Limehouse	56,770	—	25	20	—	3	—	1	9	—	58	10·7	—	2	—	3	3	—	—	—	1	9	1·7	111	20·4	118
Mile End Old Town	108,645	—	54	57	—	11	1	—	19	—	142	13·6	—	1	1	18	5	—	2	—	2	25	2·4	224	21·5	132
Poplar	172,319	6	110	50	—	21	—	—	26	—	213	12·9	—	7	5	6	13	—	4	—	1	36	2·2	317	19·2	150
South Districts.																										
St. Saviour Southwark	26,429	1	7	5	—	1	—	—	3	—	17	6·7	—	9	—	2	1	—	—	—	—	12	4·7	63	24·9	210
St. George Southwark	60,276	2	11	6	—	3	—	—	7	—	29	5·0	—	9	3	—	9	—	—	—	3	24	4·2	145	25·1	172
Newington	120,211	—	44	35	—	3	—	1	18	—	101	8·8	—	26	2	6	6	—	—	—	—	40	3·5	238	20·6	143
St. Olave Southwark	13,147	—	8	2	—	—	—	—	—	—	10	7·9	—	1	1	—	—	—	—	—	—	2	1·6	28	22·2	194
Bermondsey	83,669	3	38	10	—	3	—	1	15	—	70	8·7	—	12	4	3	7	—	1	—	—	27	3·4	172	21·4	114
Rotherhithe	41,064	5	27	15	—	13	—	1	10	—	71	18·0	—	4	1	3	1	—	2	—	—	11	2·8	68	17·3	73
Lambeth	287,211	4	136	66	—	18	2	4	35	—	265	9·6	1	34	10	14	4	—	4	—	4	71	2·6	483	17·5	112
Battersea	168,825	—	104	58	—	18	—	1	19	—	200	12·4	—	—	5	12	7	—	—	—	—	24	1·5	270	16·7	142
Wandsworth	191,922	—	67	22	—	16	—	2	30	—	137	7·4	—	1	1	1	9	—	5	—	1	18	1·0	236	12·8	126
Camberwell	256,672	—	118	59	—	13	—	3	31	—	224	10·7	—	79	9	16	29	—	4	—	6	143	5·8	546	22·2	174
Greenwich	177,286	7	70	90	—	3	—	1	28	—	199	11·7	1	14	2	22	8	—	—	—	—	47	2·8	287	16·9	132
Lewisham (excluding Penge)	84,995	1	46	17	—	5	—	1	8	—	78	9·6	—	—	2	2	1	—	—	—	2	7	0·9	119	14·6	97
Woolwich...	43,232	—	8	9	—	1	—	—	5	—	23	5·5	—	1	1	2	2	—	—	—	2	8	1·9	73	17·6	143
Lee	39,504	—	16	13	—	4	—	2	7	—	42	11·1	—	1	1	2	—	—	2	—	—	6	1·6	42	11·1	90
Plumstead	64,203	—	35	40	—	—	—	1	8	—	84	13·6	—	1	1	15	—	—	—	—	—	17	2·8	93	15·1	130
Port of London	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Including 46 cases of membranous croup.

† Including deaths from membranous croup.

sanitary areas. Erysipelas was proportionally most prevalent in St. Luke, Shoreditch, Bethnal Green, Whitechapel, and Rotherhithe sanitary areas. The 31 cases of puerperal fever notified during January included 4 in Lambeth, 3 in Paddington, and 3 in Camberwell sanitary areas.

The mortality statistics in the table relate to the deaths of persons actually belonging to the various sanitary areas, the deaths occurring in the institutions of London having been distributed among the different sanitary areas in which the patients had previously resided. During the five weeks ending Saturday, Feb. 1st, the deaths of 7837 persons belonging to London were registered, equal to an annual rate of 18·4 per 1000, against 17·5, 18·2, and 17·3 in the three preceding months. The lowest death-rates during January in the various sanitary areas were 9·4 in St. Martin-in-the-Fields, 10·0 in Stoke Newington, 11·1 in Lee, 12·8 in Wandsworth, 13·9 in Hackney, and 14·0 in Hampstead; the highest rates were 23·0 in St. Luke, 24·9 in St. Saviour Southwark, 25·1 in St. George Southwark, 25·3 in Bethnal Green, 26·4 in Holborn, 26·8 in St. George-in-the-East, and 29·9 in Strand. During the five weeks of January 1210 deaths were referred to the principal zymotic diseases in London; of these, 418 resulted from measles, 285 from diphtheria, 266 from whooping-cough, 120 from scarlet fever, 35 from enteric fever, 3 from small-pox, and 2 from ill-defined forms of fever. These 1210 deaths were equal to an annual rate of 2·8 per 1000; no deaths from any of these zymotic diseases were recorded last month in St. Martin-in-the-Fields; in the other sanitary areas they caused the lowest death-rates in Stoke Newington, St. Olave Southwark, Battersea, Wandsworth, Lewisham, and Lee, and the highest rates in Hammersmith, St. James Westminster, Bethnal Green, St. Saviour Southwark, St. George Southwark, and Camberwell. Three fatal cases of small-pox were registered in London during the month under notice, the average number in the corresponding periods of the ten preceding years being 2; of these 3 deaths, 1 belonged to Shoreditch, 1 to Lambeth, and 1 to Greenwich sanitary areas. The 418 deaths referred to measles exceeded the corrected average number by 158; among the various sanitary areas this disease showed the highest proportional fatality in St. James Westminster, Marylebone, Hampstead, St. Saviour Southwark, Newington, and Camberwell. The 120 fatal cases of scarlet fever were 23 above the corrected average; this disease showed the highest proportional fatality in Hammersmith, Strand, Clerkenwell, St. Luke, and St. George-in-the-East sanitary areas. The 285 deaths referred to diphtheria exceeded the corrected average number by 120; among the various sanitary areas this disease was proportionally most fatal in Fulham, Chelsea, St. Luke, Bethnal Green, Mile End Old Town, Greenwich, and Plumstead. The 266 fatal cases of whooping-cough were 144 below the corrected average number; this disease showed the highest proportional fatality in Hammersmith, Fulham, St. Luke, Shoreditch, Bethnal Green, St. George Southwark, and Camberwell sanitary areas. The 65 deaths referred to enteric fever slightly exceeded the corrected average number; among the various sanitary areas the highest proportional fatality of enteric fever was recorded in City of London, Bethnal Green, and Lee. The 51 fatal cases of diarrhœa were 20 below the corrected average number. In conclusion, it may be stated that the mortality in London during January from these principal zymotic diseases was more than 13 per cent. above the average.

Infant mortality in London during January, measured by the proportion of deaths under one year of age to births registered, was equal to 137 per 1000, and was considerably below the average. Among the various sanitary areas the lowest rates of infant mortality were recorded in Chelsea, Stoke Newington, St. Martin-in-the-Fields, City of London, Rotherhithe, Lewisham, and Lee; and the highest rates in St. George Hanover-square, Westminster, Hampstead, St. Giles, Holborn, St. Saviour Southwark, and St. Olave Southwark.

THE SERVICES.

MOVEMENTS OF THE MEDICAL STAFF.

THE following have arrived from Hong-Kong on completion of a tour of service there:—Surgeon-Majors Stuart and Reade and Surgeon-Captains Borradaile and Beveridge. The following have embarked for India in the *Dilwara*:—Surgeon-Majors Barnes, Deane, Kay, and Barratt, and Surgeon-Captain Crawford, Surgeon-Majors Geoghegan and Woods have severally left Bombay and Madras for England. Surgeon-Lieutenant-Colonel H. Scott, retired pay, has been appointed to Halifax, Yorks., and Surgeon-Captain Davidson to the Women and Children's Hospital, Colchester. Surgeon-Captain Lavie has been posted to the North British District and Surgeon-Captain Hinde to Devonport.

ARMY MEDICAL STAFF.

Surgeon-Major Anthony Hickman Morgan, D.S.O., retires on retired pay.

INDIA AND THE INDIAN MEDICAL SERVICES.

Brigade-Surgeon-Lieutenant-Colonel Eaton A.M.S., is posted to the Nagpore District on rejoining this Command from Allahabad. Surgeon-Major Lyle, A.M.S., on arrival from England, is posted to the Bombay District on vacating the appointment of Deputy Assistant Adjutant-General for Musketry. 13th Bombay Infantry: Surgeon-Lieutenant Standage is appointed to the Officiating Medical Charge, vice Surgeon-Lieutenant-Colonel Halliday, on sick leave. 19th Bombay Infantry: Surgeon-Lieutenant Hooton is appointed to the Officiating Medical Charge, vice Surgeon-Major Ferguson, M.B., proceeding on sick leave. 25th Bombay Rifles: Surgeon-Lieutenant F. A. W. King is appointed to the Officiating Medical Charge, vice Surgeon-Major Anderson, transferred temporarily to civil employ. Surgeon-Major R. J. Baker, M.D., is appointed to act as Civil Surgeon-Superintendent, Lunatic Asylum, and Superintendent, Medical School, Hyderabad. The services of Surgeon-Captain F. P. Maynard, M.B. (Bengal), are placed temporarily at the disposal of the Foreign Department.

NAVAL MEDICAL SERVICE.

Staff-Surgeon John Dudley, M.B., has been promoted to the rank of Fleet-Surgeon in Her Majesty's Fleet.

The following appointments are notified:—Fleet-Surgeon Stewart F. Hamilton to the *Unicorn*; Staff-Surgeon William H. Norman to the *Boscawen*. Surgeons: George Hewlett to the *Barracouta*; James Bradley to Haslar Hospital; and Alfred J. Picthorne to the *Speedy*.

VOLUNTEER CORPS.

Artillery: 1st Fifeshire: James Crawford Gibb Macnab, M.B., to be Surgeon-Lieutenant. 1st Worcestershire: Surgeon-Major R. W. Edginton M.D., resigns his commission; also is permitted to retain his rank and to continue to wear the uniform of the Corps on his retirement. *Rifle:* 3rd (Cambridgeshire) Volunteer Battalion the Suffolk Regiment: Surgeon-Captain F. M. Beckett to be Surgeon-Major. 4th Volunteer Battalion the Hampshire Regiment: Surgeon-Lieutenant W. H. L. Marriner is appointed to be Second Lieutenant. 17th (North) Middlesex: The appointment of Surgeon-Lieutenant P. S. Spokes, is antedated to Feb. 4th, 1896, in order to make him senior to Surgeon-Lieutenant John William Pare, M.D.

DEATH IN THE SERVICES.

Surgeon-Lieutenant-Colonel Dugald Blair Brown, F.R.C.S. Edin., A.M.S., at Meean Meer, Punjab, on the 27th ult., in his forty-ninth year. He was appointed Assistant Surgeon in 1872, and Surgeon in the following year, promoted to Surgeon-Major in 1884, and Surgeon-Lieutenant-Colonel in 1892. Surgeon-Lieutenant-Colonel Brown served in the Zulu war of 1879, and was present at the battle of Ulundi, for which services he was mentioned in despatches, and was granted the medal with clasp. He also served in the Boer war of 1881, with the Natal Field Force, and with the Burmese expedition of 1885–86, under Sir Harry Prendergast, in charge of the General Hospital of European Troops (medal with clasp).

"THE WAR OFFICE AND THE ARMY."

WE may call the attention of our readers to an article in the last number of the *Quarterly Review* on the above subject. It gives a succinct account of the changes and reforms that have taken place of late years, of the difficulties that have had to be encountered in their introduction, and of the parts played by different Governments and War Office officials—including the present and the late Commander-in-Chief—in the matter.

On Feb. 6th sixty-five patients were admitted to the Royal Victoria Hospital ex. s.s. *Tencer* from China.

On Jan. 23rd sixteen invalids left Bombay by the *Malabar* for conveyance to the Royal Victoria Hospital, Netley.

Correspondence.

"Audi alteram partem."

"THE LONDON COUNTY COUNCIL AND INSANITY IN LONDON."

To the Editors of THE LANCET.

SIRS,—The writer of the leading article under the above heading in THE LANCET of Feb. 1st, in dealing first with the total number of lunatics for whom the County of London is responsible to find accommodation, takes the actual number of 12,118 on Jan. 1st, 1895, and deducts therefrom the number (10,104) on Jan. 1st, 1890, showing an increase of 2014, which he divides by 5, making an average annual increase of 403. But that number is only the mean of an increasing series. Taking the numbers (quoted in the article) for Jan. 1st, 1894—viz., 11,668—it is seen that the average annual increase to that date was 391. According to the annual returns of lunatics now to hand (not including 13 criminal lunatics) the total number of lunatics in this class had by Jan. 1st, 1896, reached 12,848 Calculating the annual average increase on this longer series of years it is found that the average has risen to 457. The averages for each successively extended series of years stand, therefore, as follows: 391, 403, and 457. Still, the last-mentioned number (457) is only the mean annual increase for the extended period. The highest number of the increasing series of which 457 is the mean must, of course, be much larger than the mean. What that number should be is arrived at by the careful actuarial analysis by Mr. J. W. Palmer of entrants and exits shown by the annual returns, in which variations of admission and *exitus* rates and their relations to each other have to be taken into consideration.

Dealing in a similar manner with all classes of London lunatics and imbeciles combined, it must be first pointed out that the statement in THE LANCET that the increase was almost identical with the class dealt with above—i.e., the certified insane—and averaged 400 per annum during the years Jan. 1st, 1890, to Jan. 1st, 1895, is incorrect. The total number on Jan. 1st, 1895 (excluding criminals), was 18,541, while on Jan. 1st, 1890, it was 16,359, showing an increase of 2182, which divided by 5 yields 436. For the previous series of years (Jan. 1st, 1890, to Jan. 1st, 1894) it was 420. Adding another year to the first-named series (the Jan. 1st, 1896, returns show a total on that date of 19,325) the average is raised to 494. The averages for each successively enlarged series were thus 420, 436, and 494; and this, as in the case of lunatics under reception orders, is still only the mean of the increasing increases, the highest number of the series being, as before explained, much higher than the mean. So far from the estimate of the asylums committee being an "alarmist" one, with the exception of the few months following the opening of the Claybury Asylum, the new cases of occurring insanity, in the class for which the County Council is responsible, show, since 1890, an almost constant percentage of the total number under treatment at the beginning of each year. Dealing with the argument that "in 1891 the number of London cases of insanity reported by the Lunacy Commissioners was 16,356, and equal to 3·95 per 1000 of the population, and at the same rate of insanity the cases in 1900 would be 18,229, giving an annual increase of less than 200 in the nine years," it is easy to show that the writer has entirely overlooked the great factor of yearly accumulation to which he draws attention immediately before. By comparing the estimated population for 1894 (excluding the City) it will be found that the calculated number of cases of insanity on Jan. 1st, 1894, reckoned as above, would be about 16,900, whereas the actual figures for that date show 18,041, or rather over 4 per 1000 of estimated population. The excess mainly consists of accumulation caused by the percentage of exits having fallen short of the percentage of entrants. The same remarks apply in a much greater degree to the class of cases for which the County of London is primarily responsible, for in that class the difference between the percentage rate of entrants and that of exits is about double that of the total cases of insanity.

It was upon the basis of the foregoing calculations, and after careful comparison of admission and *exitus* rates, in which the exceptional increase at the time of the opening of Claybury Asylum was not overlooked, that the number 600 was adopted as representing the present annual increase in certified lunatics for whom the London County Council is responsible to provide accommodation. It may be added that a large number of lunatics ultimately classified as workhouse and imbecile cases is first dealt with under reception orders by the asylums committee. Experience has, moreover, shown that considerable fluctuations in actual numbers must be expected from year to year, and the County Council has to provide accommodation sufficient to enable any abnormal temporary requirements to be coped with. It is scarcely sufficient to make deductions except upon a rather long series of years, but it may be pointed out that, taking the ascertained increases for the past two years together in reception order cases alone—viz., 457 for Jan. 1st, 1895, and 740 for Jan. 1st, 1896—the results agree remarkably with the estimates for the same two years taken together, which were given a year beforehand in each case in the asylums committee's annual reports as 550 and 600 respectively. The asylums committee can only base its estimate upon conditions which have existed since the formation of the County of London. As each additional year's returns of lunatics are received careful comparisons are made so as to ascertain more nearly the present normal rate of increase and to what extent it is caused by increase in "occurring" cases or by "accumulation of chronicity." Even supposing, as a remote possibility, that some unforeseen change in conditions should occur before the end of the present century which should have the effect of arresting or decreasing the present rate of increase, it may be pointed out that any slight excess in the number of beds could be profitably utilised for boarders or for promoting improved classification.

I am, Sirs, yours faithfully,

R. N. PARTRIDGE,
Clerk of the Asylums Committee.

Whitehall-place, S.W., Feb. 5th, 1896.

*** The new figures used by our correspondent relating to the year ending on Jan. 1st last show, it is true, further aggregation of certified cases of lunacy in London, but we entirely fail to recognise any trustworthy grounds for the assumption by the London County Council that an increase which is mainly, if not entirely, due to transfer from the existing reserve of uncertified cases and to "accumulation" will not only continue, but will be maintained at an increasing rate."—ED. L.

OUT-PATIENTS AND HOSPITAL REFORM.

To the Editors of THE LANCET.

SIRS,—I have just read with much interest your leading article on the Metropolitan Hospital Sunday Fund as well as your special article on the same subject containing the practical and earnest remarks of Dr. Glover on the evils of the out-patient system of our hospitals. These evils are real and call for speedy amendment. I do not concur with the late respected President of the Royal College of Surgeons of England, Mr. Bryant, who in his speech after the paper read by Colonel Montefiore on the Need of a Central Hospital Board for London, implied that the facts that Dr. Heron and Mr. George Brown referred to at that meeting were few, accidental, and even exaggerated. In a pamphlet that I have lately written on latent gastric ulcer I allude to the fact that the patient whose case I described went to ——— Hospital a few months before his death, and the disease the physician who examined him there thought him to be suffering from was written in the patients' book as "chronic dyspepsia"; but the necropsy proved that he had two gastric ulcers of long duration. This poor man, after waiting seven or eight hours, I am told, went away even without being able to obtain his medicine, and never went again in consequence. Two or three weeks ago a man came to me in much suffering and consternation on account of the great difficulty of swallowing. He said "he had been attending six or eight weeks without deriving any benefit as an out-patient at ——— Hospital." I found the patient had an organic impassable stricture of the œsophagus, probably caused by a cancerous tumour. He had been under the care of a learned physician, but his disease had not been diagnosed. I sent him again to hospital, but with a note to

a surgeon, who has since successfully performed gastrotomy, and the man is doing well. When talking over this case to the surgeon who operated, and commenting on the fact of its non-recognition to him, he replied, "The truth is and the evil is that a patient may come to our hospital three or four times, and perhaps be seen each time by a different doctor," and this undoubtedly is not infrequently the case. That you may be able to verify this I send you a few further particulars, although not for publication.

I am, Sirs, your obedient servant,

Feb. 10th, 1893. FREDERICK H. ALDERSON, M.D.

*** Our correspondent sends us evidence of the second instance of failure of diagnosis in the case of an out-patient to which he alludes in his letter. We fail to understand why at the hospital in question members of the staff do not attend upon allotted days and see their own patients.—ED. L.

To the Editors of THE LANCET.

SIRS,—I have been reading a report of Dr. Glover's speech at the council meeting of the Metropolitan Hospital Fund advocating the appointment of a committee to investigate and report on the out-patient system of the hospitals, and, if you can afford the space, I should like to offer a few remarks. Dr. Glover is reported to have said that the out-patient system was an excrescence on hospital work and not essential to the hospital system, and that the casualty system was a further excrescence; that it was not fair to medical men, and had a bad reflex action on the profession; that it was not fair to the poor, who were often detained for hours; that it did not afford a good method of teaching medical students; that it did not make the fame of the hospitals; and that the system was not justified even by the medical men who administered it. That various reforms are desirable at many hospitals, especially the special ones, is widely conceded; but surely Dr. Glover will have great difficulty in sustaining the justice of his criticisms. How can he contend that the out-patient practice, as conducted by many conscientious, able, experienced, and hard-working men, does not contribute to the good reputation of a hospital both from a scientific point of view and otherwise? Further, I affirm that the poor do get an adequate return for the time and trouble expended by them. Their attendances seem to prove it; and under what system will they get a better? I cannot follow Dr. Glover's contention that the teaching in the out-patient room is a wrong method. It seems to me that the teaching is of the greatest value to the medical students and clinical assistants, and not to be acquired otherwise. Its value might be exemplified by endless examples. Under what other system is the student to acquire a competent knowledge of many conditions which he will rarely, if ever, meet with in the wards? I allude, amongst other things, to the earlier stages of disease processes; to the host of minor ailments which will occur to everyone; to various diseases, such as those implicating the skin, which require repeated observation and comparison to facilitate their correct diagnosis; and to many diseases of the throat, nose, ear, and eye. The working of the out-patient departments in the hands of different men imparts also lessons in other directions of the highest value. In view of the sweeping criticism directed by Dr. Glover against the out-patient system generally I fail to understand why he is prepared to let any trace of it remain. I should be extremely interested to hear what Dr. Glover proposes to substitute for the out-patient teaching and in what way the poor will receive better treatment.

I am, Sirs, yours faithfully,

OUT-PATIENT PHYSICIAN.

"WOMEN AND THE PROFESSION IN INDIA."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Jan. 18th last Dr. McReddie has written to show that there is a great need for lady doctors in India. This is certainly what appears to be the natural conclusion to those who look at the question merely from the outside; and that is why there is so much misapprehension about the subject and so much delay in the improvement of the general state of things. I have discussed the question fully elsewhere,[1] as the question of lady doctors in India is essentially a social question. In the briefest of words I will say that not only is there no need for women in the medical profession in India, but their presence is most undesirable and even detrimental to the interests of the community. So far, however, as qualified midwives are concerned there can be no two opinions. They are greatly needed, as male medical men are not generally, and perhaps will not be for some years to come, allowed to attend Indian women. With reference to Lady's Dufferin's scheme of "female medical aid," I need only say that the mere fact of native princes subscribing towards it does not show that there is any real need for lady practitioners in India nor does it prove the expediency of the scheme. On the other hand, the people of India are beginning to recognise that any exertions in this direction are futile, and the sooner "The Society for Providing Female Medical Aid" gives way to "The Society for Providing Qualified Midwives, Nurses, and Teachers" the better.

I am, Sirs, your obedient servant,

B. L. DHINGRA, M.R.C.S., &c.

Gordon-square, Feb. 5th, 1896.

[1] The February number of the Indian Magazine. (A. Constable and Co., Westminster.)

THE HEALTH OF THE ASHANTI FORCE.

To the Editors of THE LANCET.

SIRS,—In the special article on the Ashanti Expedition published in THE LANCET of Jan. 25th it is stated: "The results as regards the preservation of health are highly creditable to the medical service." Not many years ago such a report would not have been anticipated; on the contrary, we should have heard of much sickness and fever. Nowadays the easier and quicker mode of transport and the excellent accommodation and comforts of the soldier generally, coupled with enlightened science, have had everything to do with the improved state of this branch of the service. For the last twenty years medicine has been making rapid strides and particularly in the direction of sanitary science. So rapid has been this progress that it has affected all classes from the State downwards to those who live in "slums." This cycle of change has necessarily improved the state of affairs in the Army Medical Department, so that we are far ahead of the army surgeon of 1855. He is a different man altogether both in general acquirements and general education. We are aware that the army medical officer is as well informed and educated as his fellow combatant officer; that his duties are equally trying and as onerous—that this branch of the service with the commissariat are the two most important. It is satisfactory to know that the British army and navy are well represented by members of the medical profession, for modern warfare with machine guns demands most skilful medical care. If one considers for a moment the perfect arrangements of this recent campaign and all the forethought devoted to the soldier's requirements, from his drink to his personal dress, the good results obtained are not to be wondered at. It would indeed be instructive to have recorded in your paper a complete report as to the diet, regimen, and medical arrangements of this little army to Ashantiland. Was quinine used in a routine way or any other prophylactic measures adopted beyond what are known in modern preventive medicine? Since the Crimean War the whole world of medicine has changed, and it would be advantageous to hear from medical officers of this recent expedition the action of any of the newer drugs such as antipyrin, antifebrin, &c. on the bacillus malariæ. The fact remains that the science of surgery and medicine has become revolutionised from the introduction of the antiseptic system in 1880 or thereabouts. Before this date things in the surgical and medical world were quite different. Erysipelas, both medical and surgical, was a common complaint, wounds used to emit stinking odours, wards had to be closed, and the dressers and surgeons alike suffered from what was called "hospital throat." Puerperal fever, diphtheria, small-pox, scarlet fever, enteric fever, and typhus fever were pretty frequently present in towns, although the latter had considerably abated and was becoming uncommon and less virulent. At this epoch there were much jealousy and rivalry among the members of the surgical staffs of the various hospitals, and it remains for this generation of surgeons to improve upon "this perfect system of cleanliness" which the world owes to Sir Joseph Lister. Not only has the surgeon advanced in this line, but he has gone further afield and performs operations of a most heroic nature which

would not have been countenanced twenty years ago. The birth of antiseptic surgery set the medical scientist thinking, and thus our latest addition "bacteriology" came into being. Finally, we have plenty of proof of the progression of the sanitarian in our colonies and elsewhere; we only want to spur those of our neighbours who are behindhand. As the bacteriologist advances and new antitoxin remedies are produced, perhaps in a few decades that most insidious, variable, and vicious parasite the bacillus malariæ will be conquered and cease to bring upon us so much pain and sorrow as it has done recently.

I am, Sirs, your obedient servant,

Alton, Hants, Feb. 8th, 1896. J. F. BRISCOE.

A POINT UNDER THE INFECTIOUS DISEASES (NOTIFICATION) ACT.

To the Editors of THE LANCET.

SIRS,—May I ask you to insert the enclosed copy of a letter from the Local Government Board. The town clerk of Peterborough informed me that my conduct in reporting every case of infectious disease was "not justifiable," but that I should only report one in a house. Considering this opinion to be incorrect I wrote to the Local Government Board. The answer fully supports my opinion.

I am, Sirs, yours truly,

The Mansion House, Peterborough. LEONARD CANE, M.D.

[COPY.]

"Local Government Board, Whitehall, S.W., Feb. 11th, 1896.

"SIR,—I am directed by the Local Government Board to advert to your letter of the 30th ultimo, and, in reply, I am to state that, as the Board are advised, a medical practitioner is required by the Infectious Disease (Notification) Act, 1889, to give notice to the medical officer of health of the district respecting *every patient* suffering from an infectious disease within the meaning of the Act whom he may attend or be called in to visit (unless such patient is an inmate of a hospital in which persons suffering from an infectious disease are received), and that the town council must pay the prescribed fee for *each* certificate, whether or not it relates to a person belonging to a family in which the presence of infectious disease has already been notified.

"I am, Sir, your obedient servant,

"C. W. CALTON, Assistant Secretary.

"L. Cane, Esq., M.D., the Mansion House, Peterborough."

*** It is clear that any other interpretation of the Act would be impossible and lead to endless confusion.—ED. L.

"UNQUALIFIED ASSISTANTS AND THEIR PRINCIPALS."

To the Editors of THE LANCET.

SIRS,—Having read your interesting article on the employment of unqualified assistants I may be allowed to point out that the directions issued by the General Medical Council on the subject are admittedly too vague and indecipherable to be of any practical application. I venture, however, to bring before your notice one point on which the Council might be asked to place its veto in *no indefinite* terms, and that is with regard to discountenancing the system, which is by no means extinct, of locating unqualified men in branch surgeries, because it is, or should be, obvious to any that under these circumstances such unqualified practitioners are to all intents and purposes performing the medical functions of registered practitioners. Quite recently a case has come to my notice by accident in which an unregistered practitioner, under conditions which I have described, having seen a child which died, his principal, being unable to grant a certificate, represented to the coroner "dentition" as the probable cause of death—certainly a rather skilful diagnosis for one who had not seen the child alive. Now let us suppose that an inquest had been duly held in this case and that the coroner had forwarded his notes to the Council with a view of their taking cognisance of this illicit kind of practice, of what earthly use could such evidence be to the Council, seeing that it could only be evidence of that which is already self-evident—viz., that practice is conducted in these branch surgeries, as I have before observed, to all intents and purposes as though qualified men resided on the premises; and that the only practical distinction between "covering" in this sense and "covering" as applied to protecting a quack who practises on his own account consists in the difference that in the latter case the unqualified man directly pockets the cash, whereas in the former he puts it into the pocket of his principal? Under these considerations I would suggest that the Council might hold the practice I have described, after due notice, as "infamous conduct in a professional sense," and such a decree would operate with justice towards the public, with justice towards well-disposed registered practitioners, and with no undue harshness towards the unqualified assistant.—I am, Sirs, yours truly,

Queen's-road, S.E., Feb. 2nd, 1896. CLEMENT H. SERS.

*** As a matter of fact the General Medical Council does take the view of an unqualified assistant in charge of a branch practice held by our correspondent and has often been guided by it in actual cases. Perhaps our correspondent's letter may induce the Council to be more explicit in its condemnation of such a system, but such a use of an unqualified assistant is certainly improper and would render a practitioner liable to a charge of covering.—ED. L.

To the Editors of THE LANCET.

SIRS,—Referring to the inquest held by Mr. Wyatt on the body of Alice Emily Hall, upon which you comment in THE LANCET of Feb. 8th I have to say your remarks receive my entire adhesion. I have always been to the fore in the ranks of those of our profession who rigidly oppose the abuse of the use of unqualified assistants. But in this case the action of my assistant, an advanced hospital student who has passed in surgery, &c., and who is now actively reading for the medicine and midwifery final, has my entire approval. I not only endorse his action in the matter, but I desire to state emphatically that I should have been extremely annoyed and hurt had he so far forgotten his manifest duty as to have refused to accompany the weeping mother home for the purpose of rendering immediate aid and satisfaction to her in her distress. At a time of trouble and in extreme emergency I hold that the best help *available* at the moment must be obtained and given. In the present instance the mother alleged she had been to several medical men, only to find them out—it was midday. She was told that I was out also. "Oh, cannot you come and tell me whether my baby is dead or no?" "Yes, I can, and I will, and the doctor shall follow on." Really, Sirs, need I say anything more?

I am, Sirs, yours faithfully,

Stockwell-road, S.W., Feb. 9th, 1896. JOHN P. HENTSCH.

A MISCHIEVOUS IMPERSONATION.

To the Editors of THE LANCET.

SIRS,—It has just come to my knowledge that a certain person, who will shortly be charged with the offence, has been writing to two medical friends of mine begging for money. He signs himself by name and represents that I am in monetary difficulties and about to resign my practice at Ladbroke-grove, which, of course, has no foundation in fact. As probably he has written to many others besides the two I have knowledge of, will you kindly insert this in your paper? I am, Sirs, yours faithfully,

76, Ladbroke-grove, W., Feb. 10th, 1896. G. L. TURNBULL.

"EXAMINERS AND EXAMINEES."

To the Editors of THE LANCET.

SIRS,—May I trespass on your valuable space for insertion of the following facts, which I have no doubt will be of as much interest to examiners and candidates alike as they were of painful experience for me? At the recent (January) final examination of the Conjoint Board for the diploma of M.R.C.S. and L.R.C.P. I was a candidate. At the *viva-voce* in medicine I took my seat opposite a certain examiner (whose name I shall not mention here) who by his manners caused me to become considerably perturbed and nervous, and, as the following will show, brought me within an ace of losing my temper and as a certain sequence my chances of success in examination. Now, some candidates have had the bitter experience, from time to time, of being bullied by examiners, but few, I am glad to say, have had the unique privilege of being grossly and unreasonably

insulted in the manner I have been. After some few questions my examiner asked me to test some urine, which I accordingly did. In a very gruff way he asked me to enumerate the tests. I did so, giving as one molybdic acid. "What," said he, "molybdic acid?" "Yes, sir," I replied, "I've used it." "Humph, what hospital do you come from?" was his next question. I replied, "St. ———'s." He then said, "Do you mean to tell me they supply the students there with molybdic acid as a test?" "Yes, sir," I replied again, "I and other students have used it as a test at St. ———'s." At this point my examiner became quite annoyed, if not enraged, and bending his head towards me across the table he exclaimed, "Well, I don't believe you!" Truly the mental strain a candidate undergoes under ordinary conditions during examination is severe enough, but when he meets with an examiner who, not satisfied with being possessed of a gruff, snappish manner, deliberately uses language implying that the candidate is a liar, then the probable success of the poor candidate is reduced to a minimum. His observation stunned me for the time. I have since wondered whether the same examiner would be so ready to give me the lie if conversing with me in a club or in private life. I venture to say No, for under the latter conditions I could demand satisfaction and an explanation. But in the examination hall I was a candidate and he the examiner. In conclusion, I will ask you, Sirs, whether the Council of the Conjoint Board recognise a code of etiquette insisting upon courtesy as between examiners and candidates. Apparently some exceptional examiners forget that candidates pay high fees to be examined and have their knowledge in particular subjects tested, but not to be insulted. I remain, Sirs, faithfully yours,

Feb. 10th, 1896. A SUCCESSFUL CANDIDATE.

"THE ABORTIVE TREATMENT OF QUINSY."

To the Editors of THE LANCET.

SIRS,—Dr. Hingston Fox ascribes the rapid cure in a case of tonsillitis to the application of cocaine, but says some vomiting was caused. May I call attention to the following passage in the classic Watson: "When you catch the disorder at its very onset you may sometimes succeed in cutting it short by an emetic." I have had this success before the birth of cocaine. I am, Sirs, yours truly,

Fellows-road, N.W., Feb. 7th, 1896. H. F. S.

ÆSCULAPIAN SOCIETY OF LONDON.—A meeting of this society was held on Feb. 7th, Dr. Willoughby, the President, being in the chair. Dr. L. Durno read notes of four cases of Floating Kidney complicated with Hydronephrosis evidently due to Kinking of the Ureter. There was in each case a history of strain or other injury preceding an attack of severe abdominal pain, with sickness, frequent micturition (in one case this symptom was said to be absent), a defined swelling in the anterior lumbar region, subsiding as the acute symptoms passed off. The affected kidney could then be felt moving freely. In one case there was suppression of urine for twenty-four hours, and its subsequent passage was attended with evident diminution of the abdominal swelling and relief of all symptoms. Poultices, moderate purgation, vapour baths, and pilocarpin effected the relief of the more urgent symptoms, while an abdominal belt and pad were useful in controlling the mobility of the kidney.—Mr. T. Hampton showed the following:—1. A man aged forty-four with deep and extensive Rodent Ulcer of the Face. The whole of the right side of the face, with the upper jaw, right eye, and nose had been destroyed. The left turbinated bones and pharynx were freely exposed, the left eye lay bare in the orbit, and brain pulsation was visible at the basis cranii. The disease was of eighteen years' duration. 2. Sarcoma of Testes (morbid specimen). 3. Rupture of Bladder (morbid specimen). The lesion had resulted from the patient, who had been drinking, running against a standard post. Laparotomy was performed, a rent at the right side of the bladder near the urachus was stitched, and a Keith's drainage-tube left in. While apparently doing well the patient died suddenly, death being ascribed to cardiac dilatation, from which he suffered, and syncope. 4. Abscess in the Upper End of the Tibia (morbid specimen).—Dr. Ostlere showed a large Gall-stone passed per anum. A singular fact in this case was the absence of any history of pain or even illness.

THE BATTLE OF THE CLUBS.—XXI.[1]

(FROM OUR SPECIAL COMMISSIONER.)

(Continued from p. 379.)

LEICESTER:—THE LEICESTER AND LEICESTERSHIRE PROVIDENT DISPENSARY.

IN Leicester the working classes are particularly prosperous and well organised. Even before the Norman Conquest the people of Leicester had discovered the advantages of self-government. They struggled hard against the Norman barons to maintain their municipal liberties. From the earliest times the inhabitants of Leicester understood the benefits to be derived from organisation and coöperated together in defence of their mutual interests. Consequently, when the movement in favour of friendly societies and medical aid associations was first initiated their advantages were readily appreciated by the working people of this town. As a result it may now be said that a good 75 per cent. of the entire population belong to medical aid organisations of one sort or another. The greatest of these is the Leicester and Leicestershire Provident Dispensary, which now numbers some 38,600 members and employs twenty-five medical men, including some of the most distinguished practitioners of the town. This society was established as a general dispensary in 1833, and became a provident institution in 1862. According to the printed statement, "The object of this institution is to place medical assistance within the reach of the working classes of the town and neighbourhood by means of their own small periodical payments"; and "The members shall consist of servants, working people, their wives and children, who, in the opinion of the board, are unable to pay for medical advice in the usual manner, and such sick benefit societies as the board of governors may admit, on such terms as in each case they may consider proper." This is the rule, and were it strictly enforced the principal complaints against the dispensary would no longer be justified. The next rule goes on to say that "any person wishing to become a member shall leave his or her name, age, residence, and occupation at the dispensary or one of its branches, and deposit one month's subscriptions, 2*d*. for card, and an entrance fee of 1*s*." Each medical officer receives every week a list of the new candidates for membership, and it is the medical man who has to say whether they are eligible. One of these lists was shown to me, and one of the candidates was described as a grocer. There was no explanation, however, indicating whether he was a master grocer owning a large shop and making a good income, or whether he was merely a grocer's assistant living on very slender wages. How was the medical officer to find this out? He had not the time to go round and institute inquiries concerning the numerous candidates. Sometimes, however, it happened that he knew that the candidate was not a proper person to belong to the dispensary and could well afford to pay medical fees. What in that case is to be done? If the medical officer notifies to the committee that the candidate is not a proper person the money deposited is returned and the candidate is told that the medical officer objects to his being accepted as a member of the dispensary. The candidate is naturally disappointed and angry, he bears a grudge against the medical officer, and when he is ill he certainly will not seek his advice. Thus the medical officer, when he attempts to apply the rule, loses both club patient and private patient.

As it is generally considered better to have a club patient than no patient at all, the medical officers do not exercise a strict control. Thus any number of persons are members of the dispensary who could well afford to pay. One member is a town councillor, others are publicans and tradesmen or rich manufacturers. The latter have generally joined the

[1] The previous articles on this subject were published in THE LANCET on the following dates: (1) Aug. 24th, 1895, Brussels; (2) Aug. 31st, 1895, Brussels; (3) Sept. 21st, 1895, Portsmouth; (4) Sept. 28th, 1895, Portsmouth; (5) Oct. 5th, 1895, Eastbourne; (6) Oct. 12th, 1895, Lincoln; (7) Oct. 26th, 1895, Lincoln; (8) Nov. 2nd, 1895, Grimsby; (9) Nov. 9th, 1895, Bexhill-on-Sea; (10) Nov. 16th, 1895, Hull; (11) Nov. 23rd, 1895, Hull; (12) Dec. 7th, 1895, York; (13) Dec. 14th, 1895, Northampton; (14) Dec. 21st, 1895, Fermanagh Medico-Ethical Association; (15) Dec. 28th, 1895, Northampton; (16) Jan. 4th, 1896, Birmingham; (17) Jan. 18th, 1896, Birmingham; (18) Jan. 25th, 1896, Club Practices in Rural and Mining Districts; (19) Feb. 1st, 1896, The Formation of a Provident Medical Association at Folkestone; (20) Feb. 8th, 1896, The Manchester Medical Guild and Medical Aid Associations.

dispensary when only workmen. They have saved money and, little by little, became small employers, and, finally, large manufacturers. They argue that they have acquired vested rights in the dispensary. They paid their subscriptions when young and poor, and now that they are old and begin to want medical attendance they are not going to sacrifice the advantage they have paid for during all their lives simply because they have been successful and acquired wealth. Yet the same class of individual generally behaves in quite a different manner if, instead of belonging to the Provident Dispensary, he happens to belong to a friendly society. In the latter case he is entitled not merely to medical aid but to sick benefits. Now, it is a peculiar and characteristic fact that the wealthy members, when ill, rarely draw their sick benefits. If they did so the fact would be known to all the other members of the friendly society. This would lead to a considerable amount of gossip, and people would not fail to say that it was shabby for such rich men to draw sick pay from a fund in the main subscribed by working men and meant to benefit only the poorer classes. The rich man, jealous of his good reputation, consequently abandons his vested interest and makes no claim for sick benefits. The money that he has subscribed goes to enrich the friendly society for the benefit of its poor members. This is as it should be. An assurance against the effects of poverty should not be made to apply where poverty has ceased to exist. The righteousness of this action is, unfortunately, not so well understood when there is no publicity. If sick benefits are claimed it is known to everybody, but medical aid can be obtained without its being known to anyone. If the rich man draws his sick allowance the payments effected must, of course, be entered into the books and appear on the balance-sheet; but if the rich man calls upon, or sends for, the club medical officer nobody knows anything about it. This does not figure in any books or reports. Thus there are a considerable number of wealthy members of friendly societies who derive no benefits whatsoever from their societies except medical aid. They scruple to take the money of the friendly society, but they have no scruple in depriving the medical man of his fees. It is astonishing how generous, how magnanimous, these men become when exposed to the full light of publicity; but when no one sees and no one knows their conduct is very different. For instance, a well-known practitioner told me that he had to attend a member of the Manchester Unity of Oddfellows. This man killed himself by excessive drinking, thus by this vice entailing upon the club medical officer more work than would have been necessary in the ordinary course of nature; yet though this man was attended even on his death-bed by his club officer, whose services he obtained for only 4*s*. a year, it was found when his will was opened that he had left a fortune of £10,000.

Dr. Meadows, President of the Leicester Medical Society, with whom I had occasion to discuss grievances of this description, thought that medical officers in the service of friendly societies should insist on the members drawing their sick pay. They should refuse to attend those who did not draw their sick pay. If a man was sufficiently prosperous not to need his sick allowance he was rich enough to pay a proper fee to his medical attendant. If a rule to this effect could be established and strictly enforced it would make an immense difference to the friendly societies. As matters now stood these societies were enriching themselves at the medical man's expense. Another wealthy man was a member of a friendly society and required constant medical attendance though he only paid 1*d*. a week. His wife did not belong to any club and was very delicate. When the club medical officer called on the husband he was very frequently asked to give advice to the wife. For the husband he could make no charge, but he duly sent in a bill charging 5*s*. for each consultation given to the wife. On one occasion this bill amounted to £16 and was paid without the slightest difficulty or complaint. It is evident that if £16 was not too much for a year's medical attendance on the wife, 4*s*. 4*d*. was too little for a year's medical attendance on the husband.

These abuses also exist with respect to the Leicester and Leicestershire Provident Dispensary. Members above fourteen years of age pay 1*d*. a week, those under fourteen ½*d*. per week. A man and wife and all their children under fourteen can be entered for 3*d*. per week. There is no other limit to age. There is no examination as to the health of the members previously to their admission, so that persons of unsound constitutions or suffering from chronic diseases can be entered on the books of the dispensary and at once entail an immense amount of labour on the medical officer. Nor, as already explained, is there any efficient investigation to prevent the admission of the wealthy. Occasionally, when it is notorious that a person is too well off to belong to such an institution the agents refuse to call to collect his money. In that case the rich member will send in his subscription, and the clerks, who have no interest in the matter one way or the other, rarely refuse to accept the payment. Thereupon the wealthy member, who has the card on which his payments are duly entered, calls upon the medical man who on the presentation of this card cannot refuse to see him. Many very elegantly dressed women call at the dispensary for drugs, and one of these dispensary patients was, her medical attendant assured me, worth £4000. The fact that wealthy people belong to this dispensary is all the more reprehensible as the institution is essentially a charity. It cannot be compared with the self-supporting clubs. During the ten years from 1884 to 1893 the sum of £3577 10*s*. 8*d*. was charitably subscribed in aid of the dispensary, and a sum of £3629 19*s*. 3*d*. was derived from donations and legacies. Thus in ten years the charitable aid given to the Leicester Provident Dispensary amounted in all to £7207 9*s*. 11*d*. Further, the amount paid to the medical officers is so small that their services must be looked upon in the light of a charity. It is only during last year that they have been paid 1*s*. 9¾*d*. per patient. This is an excess of ¾*d*. The sum of 1*s*. 9*d*. had never before been surpassed. Indeed, it is so well recognised that 1*s*. 9*d*. is the usual sum to be paid to the medical officers that in the event of its being possible to exceed this sum there is a rule stipulating that only half the surplus shall be given to them, the other half being handed over to the management fund. By the way, this latter fund is called the honorary fund, a title which Artemus Ward would certainly define as having been "wrote sarcastik." Never was there a society of this description in which less honorary work is done. The most astounding fact about the Leicester Provident Dispensary is that, though it is constantly appealing to the munificence of the charitable, there is no earthly reason why it should not be self-supporting. The subscription is 4*s*. 4*d*. a year. Many medical aid clubs and associations take smaller subscriptions, pay all their working expenses, do not receive a penny from charity, and yet give a better remuneration to their medical officers. There were in 1894 no less than 38,610 members, who paid subscriptions to the amount of £6865 0*s*. 11½*d*., including midwifery fees, which may be estimated at about £700. Out of this sum the medical officers received only £3530 5*s*. 7*d*. It is true that they do not provide the drugs; the medical officers prescribe and the patients fetch the drugs from the central or one of the eleven branch dispensaries. Where the medical officers themselves dispense to club patients who pay a penny a week, I have rarely failed to inquire what was the cost of the drugs. The medical officers, in answer to my questions, have generally stated that out of the 4*s*. 4*d*. received per patient per annum they on an average spent sometimes a quarter, but more generally a third, of this sum for their drug bill. Therefore, as the subscriptions amounted to more than £6000 I expected the drug bill would exceed £1500; but I found, on the contrary, that it amounted to only £795 13*s*. 3*d*. Under these circumstances, I was not surprised to hear that there had been complaints as to the quality of the drugs. In 1887 a public exposure was made and a meeting convoked to whitewash the management. In the report published of the proceedings it was not stated that medical men present had protested against a resolution of approval which was intended to exonerate the management with regard to the quality of the medicaments.

Adding £15 5*s*. 9*d*.—the sum paid to the surgeon-dentist—to what was given to the medical officers and the drug bill I find that a total of £4341, or 70 per cent. of the subscriptions, was expended in medical relief. But over and above the 30 per cent. remaining in hand the honorary fund amounted to £1496 11*s*. 2*d*. What becomes of this enormous balance, represented by the difference between the sum usefully expended in drugs and medical fees and the sum actually received? It appears that in 1894—apart from £396 4*s*. 3*d*. given as collectors' wages—salaries to clerks, &c., amounted to £1376 6*s*. 9*d*. Out of this latter sum the manager received no less than £600. The most popular

medical officer in the service of the dispensary, who has something like 5000 members on his list, and who is obliged at times to see as many as 100 patients in a day, received £480 5*s.* 7*d.* Which of the two, the medical practitioner or the manager, did the most work, and, above all, which of the two did the most useful work? Why should medical men attend patients for the munificent payment of 1*s.* 9*d.* per annum so as to provide a comfortable salary of £600 a year to a layman? It is true that the manager has built up the dispensary out of a small beginning and made it the powerful institution one sees to-day, but the medical profession could have done this for themselves without the aid of any outsider. Then is it prudent, wise, and safe to place in the hands of a layman the immense power this manager possesses? Up to the year 1890 all the medical officers of the dispensary had to make an annual donation to its funds of one guinea. Then, in common with all other charitable subscribers, they became governors of the dispensary and were also *ex officio* members of the managing committee. But when complaints arose this rule was altered and it was decided that only six out of these guinea subscribers should have a right to be present at the committee meetings. Many of the medical officers of the dispensary are also medical officers to various clubs or medical aid societies, notably the London and Manchester Industrial Assurance Company. One of the medical officers of the Leicester Provident Dispensary had purchased his practice in Leicester, and it included a branch of the London and Manchester Industrial Assurance Company. He was, however, suspected of having published a hostile criticism of the dispensary, and was forthwith called to account. As a sort of punishment he was told that he must give up the London and Manchester Company, though he had been allowed to exercise this practice for several years and had bought it with hard cash. The other medical officers in the service of the Leicester Provident Dispensary were not treated in the same way, but they were not suspected of having written to the press. As matters now stand, the medical officers are dependent upon the manager and upon the governors. Anybody can be a governor who gives a subscription of £1 or upwards to the Leicester Provident Dispensary. Clergymen, benevolent old ladies, rich manufacturers, all sorts and conditions of persons, who are moved either by high motives of charity or by a meaner love of ostentation and patronage, dole out their guineas and become governors of the Leicester Provident Dispensary. The medical officers have to pay court to these governors; on their decision, on their votes, depends the fate of the medical officers; and all these donors, doubtless very worthy and estimable people, may be called to decide a purely medical or pharmaceutical question, such as the quality of drugs, though they possess no sort of technical knowledge. Not only the medical men, but to some extent the patients also, are dependent on the decisions of a lay manager and a lay committee. If some of the medical officers say that the drugs are not of good quality this opinion can be overruled by a body of governors whose only qualification to judge the question is that they have subscribed a few guineas. Is it safe that the health of the 38,000 members of this dispensary should be entrusted to the keeping of a lay manager and a body of lay governors? Is it in keeping with the interests and the dignity of the profession that medical men should be subservient to, and dependent upon, lay organisation of this description?

(To be continued.)

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Manchester and Salford Sanitary Association.

THE annual meeting of the above association was held in the Manchester Town-hall on the 4th inst. Dr. D. J. Leech presided. The report stated that the committee had decided to secure legal status for the association by obtaining a charter of incorporation under the Board of Trade. The only too common complaint was made of an inadequate subscription list, so that the committee was always hampered by want of funds, which prevented the full development of the main purpose of the association, which was to teach people the laws of health. Such varied topics as the water-supply, carbolic acid as a poison, milk-supply, lamp accidents, and the sewage question had been considered during the year. The report also gave information as to the Smoke Abatement League and the Open Spaces Committee, which last has brought its labours to a close. This is much to be regretted, for though it has no doubt awakened and interested public opinion, and "might claim to have provided examples of all the types of places of recreative exercise needed by the inhabitants of crowded towns," yet its continued help in keeping public interest alive and in assisting to bring pressure when needed on public bodies is still desirable. Mr. F. Greg no doubt disturbed the self-complacency of those who think Manchester needs no further improvement by saying "as a matter of fact there is not in Europe so mean a city for its size and importance as Manchester. It has no public buildings to speak of, no parks to speak of, and in general no amenities." There are, indeed, many fine buildings—as the Town-hall, the Assize Courts, and the Owens College, to name no others—but they are not seen to advantage as their sites are poor. By far the best position is held by the Royal Infirmary, and in the not remote future it is hoped the present building will be replaced by one worthy of a great city. Their beauty, too, is marred by the smoke which soon reduces our stone buildings to a dingy black. It must be confessed also that our parks and open spaces are not to be compared with those of London or some other cities, but for all that they are valuable as hygienic agents, and the feeling that more are wanted was very clearly shown at the last meeting of the city council. In speaking of air pollution Mr. A. E. Fletcher, late chief inspector of alkali works, said that the question of domestic smoke must be left till that of factory smoke, which is far more easy to attack, had been dealt with. He explained the steps which had been taken by the association formed in Manchester six years ago to test appliances for the prevention of smoke. The report of the special committee, to be issued immediately, would amply show that smoke could be prevented if sufficient pains were taken, and he stated that his experience was that "it was much better to point out in a friendly way how things could be done than to use force in the shape of a prosecution." Mr. Horsfall said that there need be no nuisance from domestic smoke, so far, at any rate, as houses where servants were kept were concerned, as the problem was entirely solved by the use of the Arnot grate. This grate, however, will not solve the difficulty in cottage houses, and more may be hoped in towns from cheaper gas and improved gas fires and stoves.

Election of Salford Borough Coroner.

Twelve candidates applied for this appointment—six solicitors, one barrister, and five members of the medical profession, two of whom are also barristers. Three were selected to attend before the Salford Council—Mr. A. Holmes, a Salford solicitor; Mr. J. F. Price, son of the late coroner, who has for some time acted as deputy for his father; and Mr. J. G. Gledhill, who is M.B., C.M. Glasg., L.S.A., and also a barrister of the Middle Temple. In the end Mr. Holmes was elected by a substantial majority. It is thought that Mr. Gledhill prejudiced his cause by a letter, which he subsequently withdrew. It is unfortunate that the community will be deprived of the advantage that would have resulted from his special knowledge, though no doubt Mr. Holmes will discharge the duties of his office with ability and discretion.

Another Case of Carbolic Acid Poisoning.

Mr. Smelt, the deputy city coroner, held an inquiry on the 7th inst. as to the death of a child two years of age from swallowing carbolic acid. It seems that he was left alone in a room where on the mantelpiece there was a beer bottle containing carbolic acid. The child got hold of it and drank some of the acid. His mouth and throat were badly burned, and in spite of medical care, first at home and then at the Royal Infirmary, the boy died. The coroner spoke strongly as to the carelessness and stupidity of people keeping corrosive poisons in beer or gingerbeer bottles commonly used for drinking purposes. "He would like to see it an offence for keeping a poison in a bottle other than a proper poison-bottle. They had had no fewer than thirty cases of carbolic poisoning in that court during the past twelve months, chiefly of children." The verdict was, of course, "Accidental death." The Sanitary Association seems to consider the deaths from this poison too few to justify any attempt to get it scheduled. It would be interesting to know the number considered necessary. One coroner can supply more than

thirty towards it in twelve months. How many can all the coroners throughout the country supply?

The Widnes Fatality.

In your annotation on the cases of "Poisoning by Gas in Sewers" at East Ham and Widnes you ask "who is responsible" for allowing men to jump into death-traps. Judging from the result of the inquiry at Widnes into the circumstances attending the death of Luke Farrall, Patrick Fahey, and Thomas Atherton, who lost their lives in a sewer at Muspratt's Works of the United Alkali Co. on the 27th ult., it appears that no one is responsible, that these deaths were accidental, and that therefore they could not have been foreseen. "The jury, after prolonged deliberation, returned a verdict of 'Accidental death,' and expressed the opinion that greater precautions might have been used to enforce the use of ropes and respirators. They recommended that the new rule now produced by the United Alkali Co. be quickly enforced." The rule referred to is not given in the report, and the verdict of "Accidental death" is so qualified that it seems as if the jury considered the accident one that could have been provided against, and ought not to have occurred, and therefore was not an accident; but they did not wish or were unable to find anyone responsible.

Chorlton-upon-Medlock Dispensary.

This is one of the older medical charities in Manchester, having been founded in 1826. The annual meeting was held on the 5th inst. Five thousand and seventy-four patients were treated during the year, an increase of 526 on the previous year. "Year by year," the report says, "the institution grows in favour with the respectable poor," &c., but it goes on to say it is a matter of regret that the annual subscriptions are year by year falling off "owing to deaths and removals from the neighbourhood." Does this show that the present generation is less charitable than those that have gone before, or is it that its benevolence flows in fresh channels? The balance due to the bank had increased from £52 18*s.* 10*d.* to £133 18*s.* 8*d.*, but £500 are wanted to provide a consulting-room on the ground floor and a larger, more convenient, and better ventilated writing-room, and the committee appeals for special help. The reports of medical charities are not cheerful reading. At a special meeting of trustees Dr. W. E. Fothergill was elected honorary medical officer for the out-district of Moss Side.

Manchester and Salford Hospital for Skin Diseases.

The annual meeting of the subscribers was held at the hospital in Quay-street on Friday last. During the year 1895 there were 3524 new out-patients, the numbers showing a gradual increase year by year. Many come from places more or less distant, as Bolton, Macclesfield, Oldham, Stockport, and Warrington. Until last year no in-patients were received, but in August last six beds were provided and fifteen cases admitted by the end of the year. The usual statement was made as to the abundance of charitable work to be done and of means insufficient for its accomplishment. "They had to face the fact that the establishment of the much-needed in-patient department would render the cost of working the hospital in future much higher than in 1895. They estimated that double the present subscriptions were absolutely necessary if this very useful charitable work was to be carried on." The deficiency on last year's working was £91. The hon. treasurer seemed to think it a favourable sign that so large an amount (not reported) was subscribed by the patients; but it suggests the inquiry—How many of them could afford to pay the private practitioner?

Manchester Royal Infirmary.

It is a satisfaction to find from the report of the Board of Management for the year ending Dec. 31st, 1895, that there is not the depressing story of failing income that one has almost come to look for as the rule in the reports of medical charities. The income of the Royal Infirmary for 1895 was £22,627, and of the Convalescent Hospital £2811, the total being £25,438, while the total for 1894 was £24,840. There is great need for an increase in the accommodation for patients, but many difficulties exist, and wide differences of opinion as to the best mode of dealing with them. A special committee is now engaged in considering the whole question. The transfer of the Monsall Fever Hospital to the Corporation now only awaits the sanction of Parliament to its being carried into effect. The work of the infirmary in all its departments continues to grow. Last year there were 4518 in-patients and 35,569 out-patients. In order to prevent abuse of the charity the circumstances of 15,931 of the latter were investigated by the District Provident Society, and 584 only were not fairly entitled to free hospital relief.

Feb. 11th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

THE annual meeting of the governors of the Royal Infirmary, Newcastle-upon-Tyne, was held in the institution on the evening of Thursday last. The Mayor occupied the chair, and there was a large attendance of governors, among whom the working men of the town and neighbourhood were conspicuous. The adoption of the annual report was moved by the Earl of Ravensworth, and in his remarks he drew attention to the increasing amount of work the infirmary was doing and to its financial position. The report showed that 3751 in- and 20,756 out-door patients, besides 12,642 casuals, had been treated during the year. The average cost of each in-patient had been £3 13*s.* 1¾*d.*, and the gross cost of each occupied bed £51 2*s.* 4¾*d.* The total ordinary income had been £12,336 15*s.* 6*d.*, an increase over last year's income of £1321 14*s.* 3*d.* The expenditure had been £13,543 18*s.* 8*d.* The amount contributed to the funds by subscriptions from the working men was upwards of £3000. On the whole the financial position of the infirmary was better than it had been for many years. In seconding the adoption of the report the Mayor expressed his admiration for the work done, regretted the overcrowded condition of the house, and told the meeting the corporation were wishful to do all they could to assist the governors in obtaining a site for a new building, but added his own feeling that the site the governors were asking for would not be granted, as it was a part of the town moor, and in the opinion of the town council should not be built upon. There was a very strong expression of opinion from several governors that the town council was not anxious to help the infirmary in its endeavour to obtain a new site. All the available land upon which an infirmary can be built belongs to the corporation, so that although it may not be the duty of the town council to provide or to assist in providing a site it is quite evident no new infirmary can be erected in Newcastle upon any other site than that upon which the present building stands without the help of the corporation. When the infirmary was erected, now some 150 years ago, the town council took a very different view of its responsibilities and gave a site. What was possible then is possible now, and it is to be hoped a site will be found. The town council has appointed nine of its members to talk the matter over with nine members of the infirmary committee. One meeting of the joint committee has been held, over which the Mayor presided. It was attended by the nine members of the infirmary committee and by two members of the town council. At the next meeting it is hoped a greater number of the town council representatives will attend and that they will do their best to put into practical form the kindly feeling which the Mayor states animates the council generally, and to reassure the minds of a considerable number of the governors of the infirmary who begin to doubt the existence of this often expressed kindly feeling.

Feb. 12th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

The Scottish Association for the Medical Education of Women.

THE sixth annual meeting of this association was held in the Medical College, Minto House, Edinburgh. Sir Alexander Christison, M.D., president of the association, occupied the chair. The Secretary's report dwelt upon the increasing number of students attending the school and the necessity that had thus been laid upon the association to make more satisfactory arrangements for the conduct and accommodation of the classes, and they were pleased that they had been able to obtain accommodation in such a suitable building as Minto House. If, however, the school continued to increase as it has hitherto done it will become more and more necessary for the association to acquire premises of their own. The Chairman, in moving the adoption of the report, stated that they had been compelled to move from their

former quarters, as at the beginning of the session there were sixty-four students, and the anatomical rooms in them were wholly insufficient. There was an adverse balance in the accounts of £67. Reference was also made to the success of the Students' Residence which had been opened in George-square in the beginning of the year. All the accommodation is already taken up, and the promoters are looking out for larger premises.

The Morison Lectures at the Royal College of Physicians of Edinburgh.

Dr. Alexander Bruce has been appointed to deliver the Morison Lectures this year at the Edinburgh Royal College of Physicians. He has taken for his subject the Nerve Tracts and Connexions of the Special Nerves in the Spinal Cord, Mid and Hind Brains. The first of the lectures was delivered on Friday of last week and the second this afternoon in the hall of the College. At the first lecture he dealt entirely with the distribution of the fibres of the posterior nerve roots, illustrating this by reference both to developmental, experimental, and pathological investigations. The second lecture was devoted partly to the consideration of the tracts affected in locomotor ataxia, and thereafter to the consideration of the origin, course, and destination of both the dorsal and the ventral cerebellar tracts and also of the pyramidal tracts. The lectures were illustrated by sections stained by Weigert's and Golgi's and Marchi's methods thrown upon a screen by means of lime-light. Transparencies were also used to further elucidate the lectures.

The Medico-climatology of Edinburgh.

Mr. R. C. Mossman, a gentleman in Edinburgh who takes much interest in climatology, is publishing a monthly report in connexion with the weather and health of the city. The object of the report is to show the inter-relations existing between weather and public health. From the report for January it appears that the health of the city has been eminently satisfactory, comparing favourably with the corresponding period in 1895—a result due in no small degree to the continuance of abnormally mild and dry weather and the consequent decrease of deaths from diseases of the respiratory organs. Zymotic disease also shows a marked diminution, there having been only two deaths from measles, as against forty in the same period last year. Compared with the average of the preceding ten years, measles, scarlet fever, diphtheria, and whooping-cough all show a diminished mortality, while typhoid fever, croup, and laryngitis exhibit a normal fatality. Diarrhœa is above the average. The mean death-rate is 6·4 per 1000 below the average and the lowest for the same period during the last eighteen years.

The Destructor Nuisance in Edinburgh.

Some time ago it was noted in THE LANCET that an action had been raised against the corporation of Edinburgh on the ground that the destructor at Powderhall was conducted in such a manner as to create a nuisance. The case was decided in the Court of Session against the corporation, and the court remitted to Mr. R. Hall Blyth, C.E., to visit the premises from time to time, and, after conferring with Professor Odling of Oxford, to report what changes, if any, either in the apparatus itself or in the mode of working it, were necessary in order to prevent the escape of noxious dust and other matter. Mr. Blyth's report has been submitted, and contains a large number of recommendations for the improvement in the working of the destructor, but these are too technical to be given in detail here. The corporation has evidently been considerably startled by this report and has lodged objections to Mr. Blyth's recommendations. Both the report and the objections will be considered at an early date.

The Post of Medical Adviser to the Prisons Board for Scotland.

The candidates for this position are: Sir Thomas Grainger Stewart, Sir Henry D. Littlejohn, Professor T. R. Fraser, and Dr. Stockman.

Women as Medical Missionaries.

Miss K. K. Paton and Miss Mary C. Horner, licentiates in medicine and surgery of the three Scottish medical corporations, and formerly students at Queen Margaret College, Glasgow, have been accepted as medical missionaries by the United Presbyterian Church, and are about to proceed to Manchuria.

Lord Kelvin's Jubilee.

Lord Kelvin's jubilee as Professor of Natural Philosophy in the University of Glasgow, is to be celebrated this year. A committee, on which both "town and gown" are represented, has been appointed to make the necessary arrangements. It is proposed that his lordship shall be entertained at a banquet in the city chambers and that on the following evening there shall be a conversazione in the University.

Appointment of Medical Officer.

Mr. Forbes Kydd has been appointed medical officer for one of the divisions of the burgh of Port Glasgow, vice Dr. Grieve, deceased.

The New Photography.

The various scientific societies in Glasgow are attracting large audiences anxious to become acquainted with the application of Professor Roentgen's discovery. On the 5th inst. a joint communication was made to the Philosophical Society by Lord Blythswood and Dr. J. T. Bottomley, F.R.S., and various "photographs"—one of a frog showing the skeleton—were exhibited. Dr. MacIntyre also showed a number of lantern slides prepared from "photographs" obtained by a simplified form of Roentgen's apparatus. At the Pathological and Clinical Society on the 10th inst., Dr. J. Kerr Love exhibited a number of the new radiation pictures and the apparatus by which they were obtained.

Helensburgh Infirmary.

The annual meeting was held on the 4th inst. The report showed that seventy-three patients were admitted during the year, an increase of seven over 1894. General satisfaction was expressed with the arrangements and appointments of the new building. Votes of thanks were passed to the medical and surgical staff of the hospital.

Aberdeen Royal Lunatic Asylum.

During 1895 there were admitted to the asylum 93 male and 102 female patients—195 in all. There were discharged 118 patients. The recoveries included 23 males and 58 females, a percentage of 41·5 on admissions, which is an increase of 1·6 on 1894. In December last 738 patients were in residence, the largest number under treatment in any similar institution in Scotland except those of Edinburgh and Dumfries. The new hospital will not be ready for patients till spring. The income for the past year was £23,081 17*s.* 10*d.* and the expenditure £22,879 10*s.* 10*d.*

Aberdeen Royal Infirmary.

The number of patients treated last year was 2064, 1288 being surgical and 776 medical cases. The average daily number of patients was 155, and the cost per bed for ordinary outlay was £48 15*s.*, as against £50 10*s.* 3*d.* in 1894. The contributions received during the year amounted to £7864 and the expenditure to £7952. At Lockhead Convalescent Hospital 194 male and 88 female patients were received, nearly all direct from the infirmary.

Aberdeen City Hospital.

It is proposed to extend the old lodge in Park-road at a cost of £225, and to utilise it as a reception ward for doubtful cases.

Feb. 11th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Mater Misericordiæ Hospital, Dublin.

HER EXCELLENCY THE COUNTESS CADOGAN, accompanied by Lady S. Cadogan, paid a visit to this hospital on Friday last. The Viceregal party was received by the members of the medical staff and shown the wards and more especially the new operation theatre, which has just been rebuilt and fitted with all the modern arrangements in connexion with aseptic surgery.

The Royal Irish Academy.

A portrait of a very distinguished member of the medical profession—the late Sir Robert Kane, F.R.S., LL.D., &c.—was presented to the Royal Irish Academy at a largely attended meeting on the afternoon of the 10th inst. The President, Dr. Ingram, said that no man of his time had taken a more prominent part in scientific and educational work than his distinguished predecessor. Sir Robert Kane, who was a Fellow of the Royal College of Physicians of Ireland, filled the office of President of the Academy for five

consecutive years. His eldest son, Judge Kane (brother to Captain Kane, formerly in command of the *Calliope*), was present, and expressed on behalf of the family his thanks for the manner in which the acceptance of the portrait had been proposed and seconded.

Dublin University Experimental Association.

At the meeting of the above society fixed for this (Tuesday) evening Professor Joly, F.R.S., will give a demonstration of the new Lenard or Roentgen rays. Professor Fitzgerald will take part in the discussion.

The Ulster Hospital for Women and Children.

The annual meeting of the subscribers to this hospital was held on Feb. 6th. From the report I find that 142 new cases were admitted to the children's ward during the year, while there were 2654 extern patients. In the women's department 77 new cases were admitted and there were 486 extern patients. There were 168 confinement cases and 170 children were born. There were no deaths in these cases.

Belfast Hospital for Consumptives.

At the annual meeting held on Feb. 5th I find by the report that there have been during the past year 814 new extern and 84 cases admitted into the wards. The hospital has been maintained free from debt mainly through the exertions of Mrs. Purdon, the widow of a former well-known medical man in Belfast. At the termination of the annual meeting a special meeting was held, at which a letter of great importance was read from a citizen of Belfast, Mr. Forster Green, stating that he had purchased the house and demesne known as Fortbreda, which is situated in one of the suburbs of Belfast, with the intention that they may (with such additions and changes as may be thought necessary) be used hereafter as a hospital and sanatorium specially devoted to those suffering from chest diseases. I understand that Mr. Green gave £7000 for the property, and he has contributed £4000 for investment to pay the ground rent. This munificent gift—to be called the "Forster Green Hospital for Consumption and Chest Diseases"—has (with the sanction of the Board of Trade in London) been made over to a corporate body, so that the difficulty of procuring trustees and the constantly recurring expense of transferring the properties to new ones when by death or other causes vacancies occur might be entirely avoided. At the special meeting held on Feb. 5th Mr. Green was most cordially thanked, and it was decided to approve of the proposal to amalgamate the "Belfast Hospital for Consumption" with the "Forster Green Hospital for Consumption and Chest Diseases," by which the latter will take over upon conditions to be agreed upon the real and personal property of the former hospital. A committee has been appointed to carry out this arrangement. This new hospital, which is situated in one of the most healthy districts of Belfast, on a dry, sandy soil, will be a great boon to many sufferers in that city.

Changes in the Royal University.

One of the Dublin medical schools has sent a petition to the Senate of the Royal University praying that the medical course shall not extend beyond five years from registration (at present, owing to the year spent in arts, it is really six years), on the ground that no other medical examining body requires more than a five years' curriculum, and that, owing to the present arrangement, there is a falling-off in numbers. They also pray that the proposed new arrangement, whereby students will be required to attend a course of systematic lectures in ophthalmology, shall not come into force.

Election of Direct Representative on the General Medical Council.

The preliminary poll between the three provincial candidates took place in Cork on Saturday last, and Professor Cuming of Belfast was selected by a substantial majority. There was a large poll, though several indicated that they would not take part in the preliminary contest owing to their not knowing sufficient of the comparative merits of the three provincial candidates, but they stated that they would gladly support whichever of the gentlemen was put forward as the champion of provincial interests at the official election. Professor Cuming is regarded as a very strong candidate, as, apart from his being now the deliberately chosen representative of the provinces, it is expected that all the practitioners who studied in Belfast College will give him energetic support. Here in the south his candidature will also be warmly advocated, and every effort be made to return him as a member of an assembly which many think ought in the near future to assume the functions of a medical parliament.

Supposed Suicide whilst suffering from Puerperal Fever.

One of the Cork city coroners opened a very important inquiry yesterday relative to the death of a young woman named Kate Kirby. The constabulary authorities stated that about a fortnight ago a soldier's wife was delivered by a midwife, and some time afterwards developed puerperal fever, from which she died. Last Sunday week Mrs. Kirby gave birth to a child and was attended by the same midwife. In this case also puerperal fever set in, and a couple of days ago the poor patient, still suffering from the disease, was found standing opposite a looking-glass with her throat cut and a razor in her hand. The coroner stated that the matters mentioned by the police should be inquired into, and he accordingly adjourned the inquest in order that all available evidence might be procured.

Abuse of Dispensary Visiting Tickets.

At the last meeting of the Kenmare board of guardians Dr. Robert Bohen complained that he had received a red ticket from one of the guardians, and on obeying the summons found the woman he was called on to attend was a farmer's wife. The Local Government Board inspector (Colonel Kirkwood), who happened to be present at the guardians' meeting, stated that the medical officer could proceed by legal process, if necessary, against the guardian who had issued the ticket. It is to be hoped a knowledge of that fact will cause some of our Poor-law guardians to think twice before indulging in what has been heretofore regarded by them as cheap philanthropy.

Vital Statistics and Centenarians.

The quarterly return of the Registrar-General for Ireland shows that during the quarter ended Dec. 31st, 1895 there were registed 24,535 births (12,651 boys and 11,884 girls), a number equal to an annual birth-rate of 21·5 in every 1000 of the estimated population. The deaths during the same period numbered 19,049, representing an annual rate of 16·7 per 1000. They included 9 from small-pox, 43 from measles, 204 from scarlet fever, 51 from typhus fever, 179 from whooping-cough, 84 from diphtheria, and 216 from enteric fever. Of the deaths from small-pox 8 occurred in the city of Dublin and 1 in or near Parsonstown. The 51 deaths from typhus fever were distributed as follows: 17 in Leinster, 15 in Munster (of which 5 were in Cork Union), 15 in Ulster, and 4 in Connaught. The deaths of the following very aged persons were registered:—At Kilmaganny, 1 of 104 years and 1 of 98 years; at Enniscorthy, a female of 96 years; at Blarney, a female of 102 years; at Carrignavar, a male of 100 years; at Skibbereen, 1 of 100 years; at Kilpatrick, a female of 99 years; at Cloghan, 1 of 96 years; at Limavady, 1 of 98 years; at Claudy (Londonderry), 1 of 113 years; and at Killaan (Ballinasloe), "of the 5 deaths registered 1 was that of a centenarian and probably a decade more, whilst another, though registered 90, was more probably within three years of the century."

The death is announced of Dr. Kane, dispensary medical officer of Anniscall, County Kerry, a much respected practitioner, from an acute attack of bronchitis.

Professor Byers of Belfast has been elected Président d'Honneur of the International Congress of Gynæcology and Obstetrics, to be held in Geneva in September, 1896.

Jan. 11th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Experimental Appendicitis.

IN order to throw some light on the pathogenesis of that dangerous and too common disease, appendicitis, Dr. Roger and Dr. Josué recently undertook some experimental researches bearing upon the question.[1] The appendix vermiformis of the rabbit was first ligatured after the introduction into its cavity of a few drops of a virulent culture of the bacterium coli commune. The animal died in a fortnight, the necropsy revealing the existence of suppurative appendicitis with peri-appendicitis. Further

[1] Société Médicale des Hôpitaux, Jan. 31st, 1896.

experience showed that the injection of the culture was unnecessary, the mere aseptic ligature of the appendix sufficing to induce its inflammation. In a rabbit killed three months after such a ligature the part of the appendix isolated by the thread was seen to have been transformed into a cyst shut off from the rest of the intestinal canal and filled with thick pus containing in a pure state the bacterium coli. This microbe, then, harmless so long as the flow of the intestinal contents is not impeded, becomes virulent directly stasis is established; despite the absence of any vascular disturbance (the vessels were not included in the ligature) suppurative inflammation ensued, and the occlusion produced by the ligature persisted after the absorption of the catgut. The existence of this collection of pus, which may, as in this instance, remain harmless for months, constitutes nevertheless a real danger, for its rupture, which may arise from a trifling cause, would infallibly result in an attack of acute peritonitis, seeing that it was not circumscribed by false membrane and that it contained living germs. M. Rendu found recently in the course of a post-mortem examination of a phthisical subject the appendix converted into a closed cavity filled with pus. Professor Dieulafoy[2] finds in these experiments a confirmation of the conclusions he formulated in the course of thirteen lectures delivered at the Faculty in November and December, 1895. These conclusions are as follows. Appendicitis is always the result of the conversion of the appendicular canal into a closed cavity, the closure taking place at any point in its length. Partial obliteration with resulting transformation into a closed sac is due to the progressive formation of a calculus more or less hard in consistence in proportion to the admixture in greater or less quantity of lime and magnesium salts to organic and stercoral ingredients. This calculus does not originate in the cæcum, but is the product of a true appendicular lithiasis comparable with biliary and renal lithiases. The coexistence of these three lithiases in the same family and their hereditary origin has often been remarked. Another cause of the obliteration of the appendix is local infection quite analogous with a similar obliteration of the bile duct in catarrhal icterus. In certain cases a fibrous stricture similar to an urethral stricture results in the shutting-off of the appendix. The symptoms of mild or serious appendicitis reveal themselves only when the appendicular canal is converted into a closed sac, then the germs normally present in the appendix, inoffensive up to that time, multiply and become more virulent. Thus is constituted a highly dangerous focus of infection, the principal micro-organisms present being the coli bacillus and the streptococcus (a fact verified many times by Professor Dieulafoy and his *interne*, M. Kahn). The virulence of the appendicitis may of itself suffice to kill the patient while the peritoneal symptoms are quite subsidiary. In other instances the infection spreads to the peritoneum despite the absence of any perforation of the appendix; any variety of peritonitis may be developed (generalised, encysted, acute septicæmia, and peritoneal abscess *à distance*). Then, again, peritonitis may be set up by perforation. It would then appear that until the normal canal of the appendix is converted into a closed cavity the symptoms of appendicitis are not present, and until this event has taken place we have no means of discovering the existence of a process which will infallibly result, some day, in an attack of that formidable disease.

The Average Annual Mortality of Medical Men in France.

The *Semaine Médicale* calculates the mean annual mortality amongst the 17,500 votaries of the medical profession in this country at 2·6 per cent., this figure being in excess of that representing the mortality amongst Paris medical men (2·4 per cent.). The retirement into the country for divers reasons of a certain number of Paris practitioners would easily account for this slight disparity. The total number of deaths of medical men in France would thus be 450 per annum. To fill up this hiatus no fewer than 800 newly-fledged medical men graduate each year. But from these must be subtracted a certain number of foreigners (about 125) who leave France after graduation. Of the remaining 675, 450 fill up vacancies caused by death, about 125 succeed older practitioners who retire, and the remaining 100 go to increase the standing army of medical men. Ten years ago the total number of French practitioners practising in France was 16,800, as against 17,500 at the present time.

[2] Ibid., Feb. 8th, 1896.

Frequency of Suicides in France and Germany.

During the thirteen years included between 1881 and 1893 a total of 129,018 suicides occurred in Germany as against 105,337 in France. The appended table will supply details that may be found interesting:—

Years.	Suicides in Germany.	Suicides in France.
1881	8,987	6,741
1882	9,009	7,213
1883	10,269	7,267
1884	9,763	7,572
1885	10,084	7,902
1886	10,297	8,187
1887	10,001	8,202
1888	9,308	8,451
1889	9,565	8,180
1890	9,811	8,410
1891	10,474	8,884
1892	10,551	9,285
1893	10,699	9,043

I gather from the above statistics that whereas the population of France has during this same period of thirteen years increased by only one-twentieth suicides have increased one-third. Rarer than in Germany in 1881, self-destruction has become relatively more frequent in France. It is said that suicides are in Saxony and Hamburg three times more numerous than in Bavaria. Alsace-Lorraine has the best record of all.

Annual Meetings of French Medical Societies.

The fourth session of the Obstetrical Society of France will be held in Paris from the 9th to the 11th of April next. The following are the subjects for discussion:—(1) Artificial Dilatation of the Os Uteri at the end of Pregnancy or During Labour; and (2) Treatment of Post-Partum Hæmorrhage. The questions to be discussed at the 1896 session of the Société Française d'Otologie et de Laryngologie will be:—(1) Treatment of Diffuse Papillomata of the Larynx; (2) Treatment of Adenoid Growths; and (3) Treatment of Labyrinthine Vertigo. The session will be inaugurated on May 4th.

Dr. J. B. Murphy of Chicago has been elected a foreign corresponding member of the Paris Société de Chirurgie.

Feb. 11th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Further Discoveries in Photography.

WHILST the scientific world is still busy in developing Professor Roentgen's discovery we hear that two medical men, Dr. Selle and Dr. Neuhauss, have succeeded in improving the art of photography in another direction. They have, in fact, been able to obtain photographs of objects in their natural colours by using three specially prepared glass plates appropriate for blue, green, and red lights respectively. Photographs of a similar kind have already been taken by Mr. Joly of Dublin, but his procedure, notwithstanding its great scientific value, is said to be too difficult for application in ordinary photography, whereas the methods of the above-mentioned experimenters require no more than a few seconds. At a meeting of the Photographic Society they aroused much interest by exhibiting photographs of butterflies, roses, and various other flowers in their natural colours. Professor Koenig, the well-known Berlin surgeon, in photographing a sarcomatous femur by Roentgen's method, found that the parts where the osseous substance had been destroyed by the growth were much less opaque in the photograph than the normal bone, and he was in this way able to estimate the size of the tumour.

The Hygienic Conditions of Bakeries.

At the last meeting of the Public Health Association Dr. Jürgensen read a paper on the hygienic conditions of bakeries, pointing out that in nearly all continental countries the conditions of milk-supply and meat-supply had been made much more wholesome during recent years, but that bakehouses, except in Holland, were still very defective from a hygienic point of view. The public do not

show much interest in this question, but would undoubtedly become alarmed if certain features of this trade became generally known. According to Dr. Jürgensen, the principal grounds of complaint are that in the larger towns the bakeries are underground, sometimes in the neighbourhood of places of convenience, and that the bakers take their meals in the workrooms. As overwork is quite common in this trade the health of a good many of the men is very bad, for the inhalation of dust and particles of flour favours the development of tuberculosis, and the considerable variations of temperature produce rheumatism. Numbers of the men also suffer from deformities of the lower extremities, and from want of necessary cleanliness diseases of the skin are very frequent among them. Dr. Jürgensen said that matters are much better in England, where some progress has been made mainly through the efforts of the medical profession. He suggested that underground bakeries should be abolished, that they should be situated on the ground level, and should not be in close connexion with dwelling-houses. The floor should be made of polished material so that it may be easily cleaned, all the corners of the rooms should be rounded, and the bakers should wear a working dress that can be washed. A model bakery should have a room in which articles of clothing may be deposited, and a lavatory with bathing accommodation. There should be separate rooms for shaping the dough, cooling and fermenting, and all the rooms should be ranged round a central office, from which all that goes on may be viewed. The bakers should be divided into two parties, working ten hours each, and four hours should be spent every day in cleaning. These reforms, Dr. Jürgensen said, could of course be introduced only in large factories, and they would be impossible as long as the baking trade continues to be in the hands of small employers. It is therefore desirable that the smaller bakeries should disappear and make way for a really hygienic system of bread-making. In the subsequent discussion Dr. Baer, medical officer of the Ploetzensee Prison, stated that many criminals had been bakers' apprentices and had run away from their masters on account of ill-treatment and overwork.

Feb. 11th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

Professor Celli on Disease and Death in Italy.

AT the London meeting of the International Congress of Hygiene and Demography the Roman delegate, Professor Angelo Celli, profiting by his opportunities, made a study of the sanitary system of England and the provinces, and in a special report addressed to his compatriots did not hesitate to assure them they were centuries behind the British standard in all that safeguards the public health. In an inaugural discourse with which he opened the current scholastic year of the Roman University, where he holds the chair of hygiene, he resumed the subject and was constrained to tell his audience how far Italy still lags behind the rest of Europe in her means of preventing disease and premature death. Beginning with alimentation he dwelt on the low sustaining power of the food accessible to the Italian peasant. In the Venetian territory, the Emilia, and the Abruzzi the diet is maize, rarely quite sound, and therefore inducing pellagra. On the Tuscan hills the agricultural poor subsist mainly on chestnuts; and in various tracts of the Appenines they are reduced to acorns, like their pigs. At the sea ports in the great inland towns and also at the marble quarries alcoholism is a growing vice, necessitating the enlargement of hospitals and asylums and so impairing the nutrition of the very young that, in the Roman infant schools for example, 4 per cent. of the children are rachitic. Wretchedly low wages are the Italian labourers' portion—a franc a day in the fields and 2 francs a day in the towns are the conditions under which the struggle for existence is carried on! The low resisting-power thus obtainable is put to a severe test by the duration, the quality, and the scene of labour, as, for instance, in the rice-fields around Ravenna, where the workers, mostly females, are bowed nearly double, emaciated, with ashen-grey complexions, all to gain 6*d.* a day; and their children are anæmic, tympanitic, and undersized. Pellagra, another Nemesis of perverted nutrition, caused 3113 deaths in 1889 and 4300 in 1893 in the Lombardo-Venetian territory, while goitre and cretinism, endemic in the sub-Alpine valleys, numbered 140,000 typical specimens in 1883. Italy, according to Professor Celli, is the only European country where children under nine years are employed as factory hands and at ten years are plunged into sulphur mines and marble quarries. A recent return tells us that of 1,500,000 workers more than 150,000 were under fourteen years of age, unprotected by any law to regulate their labour, and the females were subjected to the severest strain at the critical period of their development, some on the point of parturition or just risen from child-birth. The dwellings of these unfortunates are on a par with their other conditions—"thousands and thousands," according to Professor Celli, "living huddled together in dens or caves like wild beasts or in wigwams of straw; and beyond the gates of Rome there are villages composed of huts, as in Abyssinia. Out of a thousand communes there is hardly a peasant's house with a chimney." I need not enlarge on the malarial scourge, which, like those of pellagra and goitre, have been fully described in THE LANCET, except to note Professor Celli's remark that along 1400 kilometres of railway 6416 employés, well fed and well lodged, under better conditions than other labourers, were from 1881 to 1890 attacked with the fever in the proportion of 87 per cent. Tuberculosis, he tells us, in the last thirty years has caused two million deaths, as against only 200,000 due to cholera in the same period. The hard lives, mainly the imperfect sustenance, of the Italian working classes are responsible (according to Professor Celli) for these startling results: 1. When called to serve in the army 21 per cent. of the conscripts had to be sent back for constitutional defects from 1863 to 1866, and 12 per cent. from 1890 to 1894. 2. Infantile mortality is higher in Italy than in any other European country. 3. The death-rate, as a whole, is also excessive, particularly among the poor. Their mean longevity is twenty-eight years; that of the well-to-do classes fifty-five! Professor Celli's home-truths are specially opportune when an adventurous and unsuccessful colonial policy is draining this country of its life-blood and its treasure. Half-a-million lire (£20,000) a-day is what Italy is now paying for her Abyssinian war, without counting the expenses of transport service and the heavy toll of the Suez Canal. And yet her sanitary record is what Professor Celli has just told us.

Typhoid Fever at Siena.

For some weeks Siena, one of the most frequented of Tuscany's artistic centres in the tourist season, and a favourite resort for convalescents, has been visited by typhoid fever. The symptoms are in some respects peculiar so as to make the cause of the outbreak a subject of even more than professional interest. At the instance of the Government the Commendatore Dr. Pagliani head of the Public Health Department, has repaired to the spot and is now engaged with the local sanitary authorities in making the required investigations.

Feb. 11th.

NEW ZEALAND.

(FROM OUR OWN CORRESPONDENT.)

An Important Case.

A CASE in which Mr. Bangor Brooks of Mauriceville claimed £200 from Mr. S. F. Beard of Masterton was commenced before District Judge Kettle on Dec. 11th, 1895. The statement of claim was as follows. On July 13th, 1895, the defendant in his professional capacity attended Louisa Brooks, wife of the plaintiff, she then having just given birth to a child. The defendant is alleged to have negligently and unskilfully treated his said patient, particularly in allowing membranes to remain in the womb without any proper antiseptic precautions, and in not taking any steps to cure or alleviate the consequences that set up (to wit, puerperal septicæmia) on his becoming aware thereof, and generally to have neglected and failed to use proper skill and attention in his treatment of the said patient. That the defendant, if not aware of the puerperal septicæmia which set up as aforesaid, was apprised thereof three days after the birth by one Mrs. Lehmstedt, and was negligent and unskilful in not becoming so aware on being so apprised, or in failing to make no inquiry as to such symptoms or to attend the patient thereon. On July 30th the said Louisa Brooks died

of puerperal septicæmia. The child of the said Louisa Brooks has since died and she had no other children. The defendant in his statement denied certain of the allegations contained in the plaintiff's statement. Mr. Beard affirmed that he was called in to attend Louisa Brooks on July 13th; she had then already been confined, and the defendant had not previously been notified or requested to attend upon her. Her place of abode was fourteen miles and a half from Masterton, where defendant resides. The defendant proceeded at once on July 13th to Mauriceville, and attended professionally upon the patient, so that this was the only occasion on which he was employed to attend. On July 17th Mr. Beard was waited upon by Mrs. Lehmstedt, who gave him certain information as to the condition of Mrs. Brooks, but did not, as alleged, apprise him of any of the symptoms which might point to puerperal fever. Mr. Beard stated further that he advised Mrs. Lehmstedt as to the treatment to be adopted and instructed her that he would, if requested, again visit the patient. Mr. Beard was not at any time again requested to attend the patient. It seems from the evidence that the late Mrs. Brooks was attended by an unqualified midwife "who did what she could for her friend and neighbour." She sent for Mr. Beard because the after-birth would not come away. Mr. Beard after his arrival took the placenta away and gave the midwife the ordinary instructions as to the after-treatment, and requested her further to let him know how the case was progressing. This latter request was carried out through Mrs. Lehmstedt, who, as already stated, brought Mr. Beard information which did not tend to convey to his mind that anything of a serious nature had occurred to his patient. On Mrs. Lehmstedt's return to Mauriceville (on July 19th) Mr. Brooks sent for Dr. Douglas (on the recommendation of a Mrs. Brenchley, a qualified nurse who was also called in). Dr. Douglas was not made aware of the fact that the patient had already been attended to by Mr. Beard and immediately proceeded by train to Mauriceville. Dr. Douglas found the patient in a high state of fever, and from the symptoms generally diagnosed puerperal fever. He expressed surprise that a medical man had not been called in earlier, and then for the first time was made acquainted with the fact that Mr. Beard had been attending earlier in the week. Dr. Douglas then washed out the uterus with an antiseptic lotion and prescribed some medicine. Mr. Brooks then told Dr. Douglas that he had informed Mr. Beard that he did not want him any more, and requested that he (Dr. Douglas) should treat the case. Dr. Douglas accordingly went up the following day and found the patient much worse. On the next day's visit Dr. Douglas was informed on his way to the house that the woman was dead. The above is a brief history of this sad case, only one of the many occurring in this colony, where women about to be confined engage for various reasons incompetent midwives to look after them. In this case of Brooks *v.* Beard a perfect avalanche of medical testimony swept away all allegations of neglect, unskilful treatment, and error. The unanimous verdict of the jury, endorsed fully by Judge Kettle and loaded with full costs against the plaintiff, is a fit termination to a case which ought never to have been brought. The medical profession sympathise strongly with Mr. Beard and regret that he should have had to answer such a charge. It is not necessary to comment on Mr. Brooks's conduct in this case, because the evidence and the verdict sufficiently stigmatise it. It must be a matter of the greatest possible satisfaction, however, to Mr. Beard to know that his professional brothers—many of them residing at considerable distances from Masterton—rallied round their friend and assisted by their evidence to pave the way for a just verdict to be arrived at. Such a case as this under notice—where one has to take up the running after a midwife finds herself in difficulties—is always approached by members of the medical profession with fear and trembling, and Mr. Beard is to be commended for the stand he took and the battle he won.

Intercolonial Medical Congress at Dunedin.

His Excellency the Governor, Lord Glasgow, has signified his intention of being present to open the Congress. Dr. Batchelor and Dr. Lindo Fergusson of Dunedin have assisted the executive committee very considerably by making a tour through the colonies arousing interest in the forthcoming proceedings, and a good attendance in consequence is fully expected. Those of our Australian brethren who do not mind roughing it mildly for a few days will (through the kindness of the Premier, the Hon. R. Seddon, who has arranged for tents, provisions, &c., to be provided *en route*) have an opportunity of witnessing a scene of surpassing loveliness in the course of the trip from Milford Sound to Te Anu. The subject for general discussion will be Tuberculosis in Man and Animals, but it is to be limited to its etiology and treatment, with especial reference to prophylaxis. The Congress will commence on Feb. 3rd, 1896, at Dunedin.

Dec. 23rd, 1895.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary meeting of the Council was held on the 13th inst., the President, Mr. Christopher Heath, being in the chair.

The committee appointed to consider the question of the desirability of the Members of the College participating in the election of the Council presented their report, and, the Council having considered it, it was resolved—

"That, before the Fellows are addressed upon the subject, the Council do take into consideration at an early meeting the question whether Members should or should not be directly represented on the Council."

We hope to print a fuller report of this meeting in THE LANCET of next week.

Medical News.

UNIVERSITY OF LONDON.—The following candidates passed the Preliminary Scientific (M.B.) Examination, January, 1896:—

ENTIRE EXAMINATION.

FIRST DIVISION.

Armstrong, Percy, private study.
Bowden, Robert Culverwell, St. Bartholomew's Hospital.
Coplans, Myer, Simon Langton Schools, Canterbury.
Lowman, William Henville, King's College.
Waite, Henry, B.A., Goldsmiths' Institute and private study.

SECOND DIVISION.

Bain, Edward Walter, London Hospital.
Bryan, Alfred Francis, B.A., private study.
Charles, Fred, B.A., University Tutorial College.
Dawson, Frederick Walter Whitney, University College, Auckland, Westminster Hospital, and University Tutorial College.
De Zilwa, Lucian Arnold E., University College.
Fernie, Charles George, B.A., University Extension College reading and private study.
Halliday, Herbert, Westminster Hospital.
Ham, Charles Edward, Wilson's Grammar School, Camberwell.
Hamilton, Archibald Douglas, University College, Liverpool, and private study.
Heald, Thomas Dann, Brighton Grammar School.
Howell, Francis Musgrave, St. Bartholomew's Hospital.
Knowles, Percy, private study and University Tutorial College.
Krumbholz, Chas. James Izzard, Alwyne Institute.
Kunhardt, John Conrad Gle., St. Mary's Hospital.
Love, George Underwood, B.A., private study.
Matthews, Alec Leslie, London Hospital.
Meaden, Alban Anderson, St. Bartholomew's Hospital.
Osborne, Herbert, B.A., private study and University Tutorial College.
Pritchard, Harold, University College, Liverpool, and private study.
Shaer, Isidore, B.A., Jews' Free School.

FOREIGN UNIVERSITY INTELLIGENCE. — *Innsbrück:* Dr. Hochstetter of Vienna has been appointed to the Chair of Anatomy, succeeding Dr. Roux.—*Leipsic:* Dr. Rehl of Vienna has been appointed Extraordinary Professor of Syphiligraphy and Dermatology.—*Munich:* Dr. O. von Sicherer has been recognised as *privat-docent* in Ophthalmology.—*Philadelphia (Jefferson Medical College):* Dr. Geo. Dock, of the Ann Arbor University, Michigan, has been appointed Professor of Pathology and Bacteriology.—*Turin:* Dr. C. Lombroso has been appointed Professor of Clinical Psychiatrics.—*Michigan (Ann Arbor University);* Dr. E. M. Mosher of Brooklyn has been appointed Professor of Hygiene.—*Montpellier:* Dr. Estor has been appointed Professor of Operative Medicine.

MEDICAL MAGISTRATES.—The Lord Chancellor has added the names of the following medical men to the Commission of the Peace for the County Borough of Newport:—A. Garrod Thomas, M.D. Edin., M.R.C.S. Eng., and O. E. Bulwer Marsh, M.R.C.S. Eng., L.R.C.P. Edin.

WITHDRAWAL OF PERMISSION TO PRACTISE.—The Belgian Government have shown themselves capable of exercising discipline in the case of foreigners who have been granted permission to practise. A certain Hungarian medical man who had a diploma from Vienna, and who has been authorised to practise in Belgium since 1882, has now been deprived of that privilege by a Royal decree.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent medical men are announced:—Dr. John Ford Barbour, formerly Professor of Clinical Medicine at the Louisville Hospital Medical College.—Dr. A. Rózsahegyi, Professor of Hygiene in the University of Clausenburg.—Dr. Boislinière, Emeritus Professor of Midwifery in the St. Louis Medical College.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.—The next general meeting of this association will be held at the University Arms, Regent-street, Cambridge, on Thursday, Feb. 20th, Dr. Nicolson, President, in the chair. Dr. Rivers will communicate laboratory observations on Mental Fatigue and Recovery; Dr. Hyslop will read a paper on Pseudo-general Paralysis of the Insane; and Dr. Fletcher Beach will read notes of a case of Tumour of the Brain. It is announced that the examination for the certificate of the association and for the Gaskell Prize will take place at Bethlem Hospital in July. Candidates for the Bronze Medal and Prize of 10 guineas must send in their essays to the President before May 30th, 1896. Particulars of the examinations for the certificate and Gaskell Prize and of the essay can be obtained of the Registrar, Dr. Spence, Burntwood Asylum, Lichfield. The members will dine together after the meeting at the University Arms at 7 P.M. Tickets, 7*s.* 6*d.* each, exclusive of wine. Evening dress will be optional.

THE VICTORIA UNIVERSITY.—The following have recently been appointed External Examiners at the Victoria University: A. E. Barker, F.R.C.S., Professor of Surgery in University College, London, Examiner in Surgery; J. Reynolds Green, D.Sc., F.R.S., Professor of Botany to the Pharmaceutical Society of Great Britain, Examiner in Botany; Nestor J. C. Tirard, M.D., F.R.C.P., Professor of Materia Medica and Therapeutics in King's College, London, Examiner in Materia Medica and Pharmacy, and in Pharmacology and Therapeutics. The following external examiners have been re-elected: Thomas Barlow, M.D., F.R.C.P., Examiner in Medicine; C. J. Cullingworth, M.D., F.R.C.P., Examiner in Obstetrics and Disease of Women; A. C. Haddon, M.A., Examiner in Zoology; A. P. Luff, M.D., B.Sc., Examiner in Forensic Medicine; Alexander Macalister, M.D., D.Sc., F.R.S., Examiner in Anatomy; J. Lane Notter, M.A., M.D., Examiner in Public Health; E. A. Schäfer, F.R.S., Examiner in Physiology; G. Sims Woodhead, M.D., F.R.C.P. Edin., Examiner in Pathology; and Sidney Young, D.Sc., F.R.S., Examiner in Chemistry.

THE NEW ASYLUM FOR WEST SUSSEX.—The administrative county of West Sussex have at the present time 337 patients in "foreign" asylums, the greater number (225) being at Salisbury and others as far north as Warwick. These have been accommodated with much difficulty pending the building of the new asylum for the county at Grayling Wells, near Chichester. Of the six large blocks for patients four are now roofed in and the other two are rapidly rising. The wards are crescent-shaped, the female and male being on opposite sides of the medical officers' department in the centre. At the rear are the administrative buildings, as yet not built above the foundations, but in the hands of the workmen. The hall will seat some 800 persons. The workshops and laundry have not yet been commenced; the water tower, the boiler-room, and the medical officer's residence are just being started. An extensive system of corridors connects the whole of the buildings, the different blocks, the residence of the medical men, and the offices. Beneath each corridor runs a subterranean passage, which takes the pipes of the low-pressure steam-heating system, and which will be used for ventilation in summer. This arrangement will allow of the warming and ventilation being regulated without any contact by the officers with the patients, the system being worked from below. The electric light will be used, and three steam boilers are being fixed to control the heating, pumping, and lighting power. It is thought that the work will be completed in about fifteen months.

DR. LOMBE ATTHILL, some time Master of the Rotunda Hospital, Dublin, has been elected an Honorary Fellow of the British Gynæcological Society.

LORD CHARLES BRUCE will preside at the festival dinner of the Royal Hospital for Diseases of the Chest, City-road, E.C., at the Hôtel Métropole, on Tuesday, May 26th.

THE Princess of Wales, the Marchioness of Lorne, the Duchess of Teck, the Marchioness of Salisbury, the Duchess of Devonshire, Mrs. Leopold de Rothschild, and the Lady Mayoress have become patronesses of a bazaar and fête to be held in May or June next in aid of the funds of the West London Hospital.

FOOTBALL CASUALTY.—A well-known Welsh player, who was injured in the International match at Blackheath and had not played since until he appeared against Newport, was injured again on Saturday last at Aberavon, and although he continued to play it is feared he sustained serious internal injuries.

CONJOINT EXAMINATIONS IN IRELAND BY THE ROYAL COLLEGE OF PHYSICIANS AND THE ROYAL COLLEGE OF SURGEONS.—The following gentlemen have passed the examination for the Diploma in State Medicine: Ernest G. Annis, M.R.C.S. Eng., L.R.C.P. Lond.; Charles R. Chichester, L.R.C.P. and S. Irel.; George W. Dawson, L.R.C.P. and S. Irel.; Wm. J. Greer, F.R.C.S. Irel., L.R.C.P. Irel.; and J. G. Goodlake Murray, L.R.C.P. and S. Edin.

THE DIFFUSION OF SMALL-POX.—Small-pox in London has now for some time been stationary. In the several four-weekly periods which have passed since the outburst in July, August, and September of last year, the numbers of notified cases have been respectively 42, 36, 33, and 41. The last four weeks alluded to ended with Jan. 25th of this year, and the cases occurred in eighteen of the forty-four sanitary districts of London, including the port. In only four instances did the notifications exceed 2—namely, Kensington and Greenwich 4 each, Lambeth 5, and Poplar 6. There had been no death registered in the metropolis since the second week of this year. Last week the admissions to hospital were only 6, as compared with 17, 14, and 12 in the preceding three weeks, and 64 patients remained on the ships at Long Reach last Saturday, as against 74 on the Saturday previous. But if small-pox has been thus quiescent in London it has been otherwise in the provinces. At Oxford, for example, several cases have been traced to a tramp from the sister university town of Cambridge, and revaccination has been urged on the students of the university in consequence of the occurrences. The infectious hospital did good service in the emergency. In Lancashire further cases have lately been heard of in Oldham, and at Royton recrudescence of the disease has made calls upon the hospital at Cinder Hill. In Heywood, in January, some cases were notified. Here there is no isolation hospital. At Shields at the end of January the ss. *Glen Tamar*, from the Grecian Archipelago, reported cases of small-pox on board. The River Tyne port authority at once had the patients removed to the floating hospital and the vessel thoroughly disinfected. An additional case of small-pox at Saddleworth last month was removed to hospital at Running Hill. At Stroud, as we have already mentioned, the attempted removal of a case to a hastily improvised hospital at Oakridge, met with strenuous opposition from the residents near at hand, and the hospital was burned to the ground by a riotous mob. The patient unfortunately died. The notification of one or two cases of small-pox at Cheltenham has led the medical men to meet and pass resolutions strongly in favour of vaccination and of the enforcement of the Vaccination Laws as did the medical men of Gloucester shortly before. In Gloucester there had occurred up to the end of January as many as 69 cases, exclusive of a few from the rural area around. Of the 69 city cases, 31 were of unvaccinated children, and 9 deaths occurred, while 37 others had been vaccinated in infancy only, and many of them imperfectly. One person removed to hospital and found to be suffering from chicken-pox contracted the graver malady in the institution, the patient being an unvaccinated child. One of the rural cases, also that of an unvaccinated child, proved fatal. At Bristol one or two cases occurring in January have been dealt with, and it is stated that the plans for a permanent hospital

are now in a forward stage for final submission to the Local Government Board. A serious matter has come to the cognisance of the Exeter corporation—namely, that a young man has been discharged from the Yeovil Hospital while still suffering from small-pox, or at any rate while in an infectious stage of convalescence. He appears to have had a certificate of fitness to travel given to him before the railway authorities would allow him to return to Exeter, which he did in a compartment by himself. On his arrival at his mother's home a medical man certified to his infectious condition and he was removed to hospital. The action of the Yeovil authorities is one that demands inquiry at the hands of the Local Government Board. In South Wales, and especially in Glamorganshire, the experience of the present year has been gloomy. At Aberavon, Pontypridd, and Dowlais cases of tramp-spread small-pox have been reported. At Cardiff upwards of a dozen cases developed in the workhouse, and on the 31st ult. the number of patients suffering from the disease in the town hospital was 17, and 2 deaths had taken place during the month. The School Board have refused to grant permission to the vaccination authority to examine children for the purpose of securing protection against small-pox by means of vaccination. Two fresh cases have been reported in Bridgend, and a hospital of some sort is to be erected, but disputes as to site and cost seem to have delayed the matter. At Abercarn a cottage in an isolated position has been acquired for the housing of a case of small-pox and the members of the patient's family. At Swansea 5 cases remained under treatment at the close of January, 2 fresh cases coming from Morriston in the concluding week. An order has been issued for the revaccination of every member of the Glamorganshire police force. In the last week of January no admission, discharge, or death was recorded in Dublin so far as small-pox was concerned, 5 patients only remaining in hospital. The ss. *North Cambria* has reached Limerick with small-pox on board, 8 of her crew having had to be sent to the workhouse hospital suffering from the disease. She hails from Baltimore.

PROPOSED ASYLUM EXTENSION.—At a meeting of the Belfast Corporation held on Feb. 8th a report on the proposal to provide additional asylum accommodation was presented by the representatives of the corporation on the board of governors of the Belfast Lunatic Asylum. In it they say there are now in the Belfast Asylum and the annexe at Ballymena 443 patients chargeable to Belfast, and there is accommodation in the asylum for 400 patients (males) and at Purdysburn for 80 patients (males), which would be more than sufficient for all the Belfast patients if the county Antrim ones were removed; but as the board of control wish to have a number transferred from the union workhouse to the asylum, and the number of lunatics is increasing annually, the representatives of the corporation think that additional accommodation, comprising administrative and two chronic blocks, should now be provided at Purdysburn for 300 chronic patients as part of a complete asylum. Such buildings can be erected at a cost of from £50,000 to £60,000, and they recommend this should be done. The council unanimously adopted this report. At the monthly meeting of the Belfast Asylum, held on Feb. 10th, it was stated that, owing to overcrowding, it had been found necessary to place bedsteads in the corridors through the female division as the dormitories will not accommodate the admissions. There is now in the Belfast Asylum an excess over the normal accommodation of 199 males and 108 females. It was stated by one of the guardians recently that there are 433 lunatics in the Belfast workhouse whom the ratepayers have to support at their own cost.

DIPHTHERIA IN LONDON.—Diphtheria in London is diminishing in number of cases. In the concluding four weeks of last year the notified cases numbered 1136, and averaged 284 weekly, whereas in the first four weeks of the present year the notified attacks fell to 988 and the weekly average to 247. In the concluding four weeks of last year the districts contributing 50 cases and upwards were seven, with an aggregate of 532 cases, and thirty-nine of the forty-three sanitary areas were invaded; whilst in the first four weeks of this year the districts contributing 50 cases and upwards were only 6, with an aggregate of 358 cases. This year, however, all the forty-three sanitary districts were invaded, though some had only single attacks to chronicle. In the matter of fatality the closing four weeks of 1895 showed a total of 265 registered deaths, or 66 weekly, as compared with 224 deaths in the first four weeks of 1896, or 56 weekly. On the data so far given the disease would seem to be declining whether death or attack be considered. The weeks ended respectively Feb. 1st and 8th, however, somewhat modify this conclusion, since the registered deaths in these weeks have been severally 61 and 63—a nearer approach to the old state of things. Last week the 63 deaths were 29 in excess of the corrected average for the sixth week of the decennial period 1886–95, and the number is a higher one than occurred in any week since that ending Jan. 4th. Of these deaths all save 3 were in persons under twenty years of age, and the sanitary areas chiefly concerned were Islington and Greenwich (each credited with 6 deaths), Chelsea and Battersea (each with 5), and Fulham (with 4). The admissions in the week to hospitals of the Metropolitan Asylums Board numbered 94, as compared with 99, 122, and 102 in earlier weeks. The patients remaining under treatment on Saturday last were 706, and showed an increase from 687 on the preceding Saturday. In the Outer Ring there were 12 deaths, half of which took place in West Ham.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

Opening of the Session.

THE second session of the new Parliament was opened by Royal Commission on Tuesday, the 11th inst., when, as usual, a Speech from her Majesty the Queen was read. Among the measures of legislation promised in the Speech were a Bill amending the law with reference to compensation to workmen for injuries received in the course of their employment, a Bill to amend and consolidate the law relating to public health in Scotland, a Bill to check the importation of destitute aliens, and a Bill for amending the law with respect to the supply of water to the metropolis.

The Ventilation of the House of Commons.

During the recess a number of alterations were made in the arrangements for the ventilation of the House of Commons, and it is hoped that members will no longer have cause to complain of evil smells, as they had towards the latter part of last session.

Legislation for the Mining Industry.

Sir Matthew White Ridley, Secretary of State for Home Affairs, received an important deputation from the National Conference of Miners with reference to an Eight Hours Bill for miners and various other matters connected with the mining industry. In the course of his reply to the deputation he said that the Home Office authorities quite recognised the great dangers affecting the industry, especially in connexion with fiery mines and coal-dust, and he entertained strong hope of being able to introduce legislation dealing with them at an early period. He was sure, he said, that all concerned would do their best to secure that every precaution was taken that engineering ingenuity could suggest to remove the danger from mines which were specially fiery and dangerous. Although he had not taken counsel with his colleagues on the subject of an Eight Hours Bill for Miners, he conceived that in all probability the Government would not be prepared to take charge of such a measure, but at the same time he did not think that they as a Government would oppose it. In all probability the matter would be left to the House itself to decide.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

ADAM, JOHN, M.B., C.M. Glasg., has been appointed Honorary Medical Officer to the Forres Leanchoil Hospital, Morayshire.

AITKEN, J. S., L.R.C.P. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Shap Sanitary District and the Workhouse of the West Ward Union.

ATKIN, CHAS., L.R.C.P. Lond., F.R.C.S., has been appointed Senior Surgeon, Sheffield General Infirmary, vice A. Jackson.

ALLFREY, C. H., M.D. Edin., M.R.C.P. Lond., F.R.C.S., D.P.H. Camb., has been appointed Assistant Physician to the Hastings and East Sussex Hospital.

BOUCHER, A. H., M.D., C.M. Edin. D.P.H. Camb., has been appointed Assistant Honorary Medical Officer to the Hertford General Infirmary.

COLMAN, W. S., M.D. Lond., M.R.C.P., has been appointed Assistant Physician to the National Hospital for the Paralysed and Epileptic, Queen-square, W.C., vice J. R. Bradford, resigned.

EDEN, R. A. S., M.B., C.M. Aberd., D.P.H., has been appointed Medical Officer for the Norton Canes Sanitary District of the Cannock Union.

EDMOND, G. M., M.D., C.M. Aberd., has been appointed Second Assistant Physician to the Royal Infirmary, Aberdeen.

ELSWORTH, R. C., M.B., C.M. Edin., M.R.C.S., has been appointed Visiting Surgeon to the Swansea Hospital.

FOTHERGILL, W. R., B.Sc., M.B., C.M. Edin., has been appointed Honorary Medical Officer for the out-district of Moss-Side, Chorlton-upon-Medlock Dispensary.

FYFE, T. H., M.B., C.M. Aberd., has been appointed Honorary Medical Officer to the Forres Leanchoil Hospital, Morayshire.

GARSTANG, F. W., M.R.C.S., has been appointed Medical Officer of Health by the Northwich Urban District Council.

HAIGH, T. A., M.R.C.S., has been reappointed Medical Officer by the Meltham Urban District Council.

HAINES, EDWARD, L.R.C.P. Lond., M.R.C.S., has been appointed Junior Medical Officer for the Infirmary of the Wandsworth and Clapham Union.

HAY GEO. P., M.D., C.M. Aberd., has been appointed Honorary Medical Officer to the Forres Leanchoil Hospital, Morayshire.

JENNINGS, W. M., M.B., B.Ch. Dub., has been appointed Medical Officer of Health for the Dore Rural Sanitary District, vice Benson, resigned.

JONES, RICHARD, M.D., C.M. Edin., D.P.H. Camb., has been appointed Medical Officer of Health for the Urban District of Festiniog, vice Hugh Rees, resigned.

KENDALL, HERBERT W., M.R.C.S., L.R.C.P. Lond., has been appointed Assistant Surgeon to the Bristol Hospital for Sick Children and Women.

KENDALL, B. C., L.R.C.P. Lond., L.M., M.R.C.S., has been reappointed Medical Officer to the Heiston Public Dispensary.

MACKINTOSH, ANGUS, M.D. Glas., L.F.P. & S. Glas., has been re-appointed Medical Officer of Health by the Clay Cross Urban District Council, Derbyshire.

MARTINE, W. R., M.B. Edin, C.M., has been appointed Physician to the Western District Combination Fever Hospital, Haddington, and District Medical Officer of Health for the parishes of Athelstaneford, Morham, and Jester.

MASON, D. J., M.D., C.M., L.R.C.P., L.R.C.S. Edin., has been appointed Certifying Surgeon for the Maidenhead District, under the Factory Act, vice Playne, resigned.

MILLIGAN, G. C., M.B., C.M. Aberd., has been appointed Honorary Medical Officer to the Forres Leanchoil Hospital, Morayshire.

MORRIS, C. D., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health by the Sunbury District Council.

MURRAY, W., M.D., C.M. Edin., has been appointed Medical Officer by the Warnley Union and Rural Council.

NITCH-SMITH, REGINALD, L.R.C.P. Lond., M.R.C.S., has been appointed House Physician to Westminster Hospital, S.W., vice Lowne, resigned.

ODELL, R., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant Honorary Medical Officer to the Hertford General Infirmary.

OLIVER, G. H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Clayton Urban Sanitary District, vice A. E. Turnstall.

PECK, E. G., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer for the Queensbury Sanitary District of the Halifax Union.

RACKHAM, A. R., L.R.C.P., L.M. Edin., M.R.C.S., has been appointed Medical Officer for the Workhouse of the Mitford and Launditch Union.

SCANTLEBURY, GEO. F., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Public Vaccinator for Cheltenham, Victoria, Australia, vice Moore, resigned.

STABLEFORD, F. R. G., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant Medical Officer at the Workhouse of the Aston Union.

STEVENSON, A. K., M.D., B.S. Irel., has been appointed Medical Officer of the Dough Dispensary, vice Angston, deceased.

TUNSTALL, J. O., M.D. Lond., M.R.C.S., has been reappointed Honorary Medical Officer to the Home of Rest, Sutton Coldfield.

WARD, FRANCIS, M.B., C.M. Edin., has been appointed Senior House Surgeon to the East Suffolk and Ipswich Hospital.

WEARNE, WALTER, M.R.C.S., has been reappointed Medical Officer to the Helston Public Dispensary.

WILSON, S., L.R.C.P., L.M. Edin., has been appointed Medical Officer for the Enniskillen Workhouse Infirmary.

WOOD, M. A., L.R.C.P. Lond., F.R.C.S., has been appointed Medical Officer of Health for the Ledbury Urban Sanitary District, vice H. O. Sandford.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BELGRAVE HOSPITAL FOR CHILDREN, 79, Gloucester-street, London, S.W.—House Surgeon. Board, lodging, fuel, and light provided.

BIRMINGHAM PROVIDENT DISPENSARY (SANDS-COX TRUST), Hockley Branch.—Medical Officer. Minimum salary £250 per annum, with residence and gas.—Applications to the Secretary, 20, Weston-road, Handsworth, Birmingham.

BRISTOL GENERAL HOSPITAL.—Surgeon.

BUCKINGHAMSHIRE GENERAL INFIRMARY, Aylesbury.—Resident Surgeon and Apothecary, unmarried. Salary £80 for the first year with an advance of £10 per annum up to £100, with board, lodging, washing, coals, and candles in furnished apartments.

CUMBERLAND INFIRMARY, Carlisle.—Assistant House Surgeon, for one year. Salary £40 per annum, with board, lodging, and washing.

EAST LONDON HOSPITAL FOR CHILDREN, Glamis-road, Shadwell, E.—House Physician. Board, lodging, &c., provided.

EAST SUFFOLK AND IPSWICH HOSPITAL, Thoroughfare, Ipswich.—Second House Surgeon, unmarried, for one year. Salary £70 per annum, with board, lodging, and washing.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway, N.—Obstetric Physician to Out-patients. Also House Physician. Salary £80 per annum, with board, lodging, and laundry in the hospital.

GRIMSBY AND DISTRICT HOSPITAL, Grimsby.—Locum Tenens for House Surgeon.

HAVERSTOCK-HILL AND MALDEN-ROAD PROVIDENT DISPENSARY.—Medical Officer.

LINCOLN COUNTY HOSPITAL, Lincoln.—Assistant House Surgeon, for six months. Honorarium of £10, and board, residence, and washing.

LIVERPOOL ROYAL INFIRMARY.—Assistant Honorary Physician.

LONDON HOSPITAL, Whitechapel, E.—Two Surgeon Dentists.

MANCHESTER ROYAL INFIRMARY (BARNES CONVALESCENT HOSPITAL, Cheadle).—Clinical Assistant at the Barnes Convalescent Hospital, Cheadle, for six months. Board and lodging provided.

NEW HOSPITAL FOR WOMEN, 144, Euston-road, London.—Clinical Assistant for the Out-patient Department for one year.

PARISH COUNCIL OF KINCARDINE, Ross-shire.—Medical Officer (resident). Salary £42 10s. as Medical Officer, and £5 per annum as Vaccinator. Applications to Chairman of the Council, Ardgay, N.B.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William-street, Strand.—Surgeon.

SALFORD ROYAL HOSPITAL.—House Surgeon. Salary £100 per annum, with board and residence.

SHEFFIELD GENERAL INFIRMARY.—Junior Assistant House Surgeon, for three years. Salary, £50 per annum, with board, lodging, and washing.

SHEFFIELD ROYAL HOSPITAL.—House Surgeon for two years, unmarried. Salary £100 guineas per annum, with board (exclusive of wine and beer) and lodging.

SHEFFIELD UNION.—Resident Assistant Medical Officer (single or widower) for the Workhouse, Fir Vale, Pittsmoor. Salary £100 per annum, with apartments, rations, and the other usual allowances. Applications to the Clerk to the Guardians, Union Offices, Sheffield.

THE HOSPITAL FOR WOMEN (THE LONDON SCHOOL OF GYNÆCOLOGY), Soho-square, W.—Clinical Assistants.

UNIVERSITY COLLEGE, London.—Professor of Pathology.

VICTORIA HOSPITAL, Folkestone.—House Surgeon. Salary £80 a year, rising £10 annually, with board, residence, and washing.

VICTORIA UNIVERSITY, THE YORKSHIRE COLLEGE, Leeds.—Demonstrator of Physiology. Salary £150.

WESTERN GENERAL DISPENSARY, Marylebone-road, London.—Two House Surgeons, unmarried. Salary £70, or £50 with board and residence.

Births, Marriages, and Deaths.

BIRTHS.

BENNETT.—On Feb. 6th, at London-road, Leicester, the wife of F. W. Bennett, M.D., of a daughter.

DEACON.—On Feb. 11th, at Warlingham House, West Croydon, the wife of J. G. Deacon, M.D. Irel., of a daughter.

LLEWELLYN.—On Feb. 5th, at Barkfield-road, Wandsworth, the wife of John Llewellyn, M.R.C.S. Eng., of a daughter.

MORRISON.—On Feb. 4th, at Gervase House, Duffield, Derby, the wife of Robert Morrison, L.R.C.S., &c., of a son.

RICHARDSON.—On Feb. 3rd, at Audrey House, Gosport, Hants, the wife of Martin Richardson, M.B., C.M. Edin., of a daughter.

WILLIAMS.—On Feb. 8th, at Fairfield, Pontypridd, Glam., the wife of T. R. Hamlen Williams, M.R.C.S., L.R.C.P., of a daughter.

MARRIAGES.

HOSKINS—PASCHAL.—On Feb. 12th, at St. Nicholas Parish Church, Chiswick, William Hoskins, M.B. Aberd., of Lansdowne House, Broxbourne, to Georgina Augusta, only daughter of the late Col. Paschal, 70th Regt., of Morton House, Chiswick.

HOWARD—CUNNINGHAM.—On Feb. 8th, at St. Saviour's, Aberdeen-park, John Alexander Howard, M.D. Lond., only son of John Howard of Ashby-road, Canonbury, to Emily Gertrude, eldest daughter of the late Chas. Cunningham, of Balfour-road, Highbury New-park.

IONIDES—CAVAFY.—On Feb. 6th, at the Greek Church, Moscow-road, W., Theodore Henry Ionides, M.B. Lond., B.S., F.R.C.S., of Palmeira-square, West Brighton, to Catherine, daughter of John Cavafy, M.D., F.R.C.P., of Upper Berkeley-street, W.

LOCKET—STEELE.—On Feb. 5th, at Liscard, Thomas Wood Locket, M.A., M.B. Camb., Atherstone, Warwickshire, to Hilda, daughter of W. J. Steele, of Priory Nook, New Brighton.

PARROTT—HOOPER.—On Feb. 6th, at St. Paul's Church, Ramsgate, Thomas Godfrey Parrott, L.R.C.P. Lond., M.R.C.S., of Aylesbury, to Maude Frances, eldest daughter of the late Rev. J. H. Hooper of Faversham.

RAWLINGS—MORRIS.—On Feb. 6th, at Holy Trinity Church, Hartlepool, Surgeon-Lieutenant-Colonel James Rawlings, J.P., of the Durham Artillery, Hughenden, Hartlepool, to Maria, widow of the late F. G. Morris, J.P., of Moore House, Hartlepool.

DEATHS.

EDIS.—On Feb. 8th, at Barton-street, Gloucester, Thos. Edis, M.R.C.S., L.S.A.

HARDCASTLE.—On Feb. 11th, at 18, Chester-Crescent, late of Archbold Lodge, Newcastle-upon-Tyne, Hugo Macauley Hardcastle, M.D., second son of the late Bey Hardcastle of Alexandria, aged 36.

SWIFT.—On Feb. 6th, at 14, Leyburn-terrace, Dover, Benjamin Pratt Swift, M.D., Deputy-Inspector-General of Hospitals, late 14th and 96th Regiments, aged 79.

WALKER.—On Feb. 9th, at 54, Fulham-park Gardens, S.W., the Rev. Hyde Edwards Walker, M.A. Oxon., L.R.C.P. Lond.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (17th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), Middlesex (1.30 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.).

TUESDAY (18th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY (19th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY (20th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Great Northern Central (Gynæcological, 2.30 P.M.).

FRIDAY (21st).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.) Gt. Northern Central (2.30 P.M.).

SATURDAY (22nd).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY (17th).—SOCIETY OF ARTS.—8 P.M. Professor J. M. Thompson: The Chemistry of certain Metals and their Compounds used in Building, and the Changes produced in them by Air, Moisture, and Noxious Gases, &c. (Cantor Lecture.)

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. W. Watson Cheyne: The Objects and Limits of Operations for Cancer. (Lettsomian Lecture.)

TUESDAY (18th).—ROYAL STATISTICAL SOCIETY (Royal United Service Institution, Whitehall, S.W.).—5 P.M. Dr. F. Warner: Mental and Physical Conditions among 50,000 Children seen 1892-94, and the Methods of Studying Recorded Observations, with special reference to the Determination of the Causes of Mental Dulness and other Defects.

SOCIETY OF ARTS.—8 P.M. Mr. H. F. Parshall: The Development of Electrical Traction Apparatus.

WEDNESDAY (19th).—ROYAL METEOROLOGICAL SOCIETY (25, Gt. George-st., Westminster).—7.30 P.M. Mr. Edward Mawley: Report on the Phenological Observations for 1895.—Mr. Robert H. Scott: Notes on the recent unusually high Barometer Readings in the British Isles.—Mr. Richard Inwards: Turner's Representations of Lightning.

SOCIETY OF ARTS.—8 P.M. Mr. H. Macan: Report of the Royal Commission on Secondary Education.

NORTH-WEST LONDON CLINICAL SOCIETY.—8 P.M. General Meeting.—8.30 P.M. Clinical Meeting.

ROYAL MICROSCOPICAL SOCIETY (20, Hanover-sq., W.).—8 P.M. Mr. F. R. Dixon Nuttall: On the Male of Stephanoceros Eichhornii—Messrs. W. and G. S. West, New Freshwater Algæ.

THURSDAY (20th).—HARVEIAN SOCIETY (Stafford Rooms, Titchborne-street, W.).—Dr. J. E. Squire: Some Clinical Aspects of Pneumonia.

SOCIETY OF ANÆSTHETISTS (20, Hanover-square, W.).—8.30 P.M. Dr. Prince Stallard (Manchester): Pental, its administration in 150 cases.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (17th).—LONDON POST-GRADUATE COURSE.—Roy. Lond. Ophthalmic Hospital, Moorfields, 1 P.M., Mr. W. Lang: Conjunctival Affections.—London Throat Hospital, Gt. Portland-st., W., 8 P.M., Mr. G. C. Wilkin: Nasal Polypi.

TUESDAY (18th).—LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 2 P.M., Dr. Craig: Stupor, Katatonia, Dementia and Senile Insanity.

ROYAL INSTITUTION.—3 P.M. Prof. Charles Stewart: The External Covering of Plants and Animals: its Structure and Functions.

WEDNESDAY (19th).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3 P.M. Lecture by Dr. Beevor.

HOSPITAL FOR CONSUMPTION, &c. (Brompton).—4 P.M. Dr. Habershon: Pneumothorax.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—5 P.M. Dr. Morgan Dockrell: Parasitic Diseases (Animal).

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. Eccles: Anomalies of the Testis in relation to Herniæ.

LONDON POST-GRADUATE COURSE.—Roy. Lond. Ophthalmic Hospital, Moorfields, 8 P.M., Mr. A. Q. Silcock: Affections of the Iris.—Hospital for Skin Diseases, Blackfriars, 4.30 P.M., Dr. Payne: Impetigo and Cutaneous Suppuration.

THURSDAY (20th).—ROYAL INSTITUTION.—3 P.M. Prof. H. Marshall Ward: On some Aspects of Modern Botany.

LONDON POST-GRADUATE COURSE.—Central London Sick Asylum, Cleveland-st., 5.30 P.M., Mr. Jonathan Hutchinson: Clinical Lecture.—Brit. Inst. of Preventive Medicine, Gt. Russell-st., W.C., 3.30 P.M. Dr. Allan Macfadyen and Mr. A. G. Foulerton: Qualitative Tests for Albumins.

FRIDAY (21st).—LONDON POST-GRADUATE COURSE.—King's College, 3 to 5 P.M. Prof. Crookshank: Anthrax and Malignant Œdema.

ROYAL INSTITUTION.—9 P.M. Mr. E. Frankland: The Past, Present, and Future Water Supply of London.

SATURDAY (22nd).—ROYAL INSTITUTION.—3 P.M. Lord Rayleigh: Light.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—5 P.M. Dr. Morgan Dockrell: Pustular Dermatitis.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 A.M. by Steward's Instruments.)

THE LANCET Office, Feb. 13th, 1896.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Maximum Temp Shade	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Feb. 7	30·48	S.W.	44	43	51	47	39	...	Cloudy
,, 8	30·24	S.W.	41	40	77	55	38	...	Cloudy
,, 9	30·17	W.	50	49	63	54	40	0·09	Bright
,, 10	30·41	W.	39	38	71	51	38	...	Foggy
,, 11	30·48	W.	43	42	65	52	38	...	Hazy
,, 12	30·34	S.W.	41	40	81	57	40	...	Fine
,, 13	30·41	N.E.	47	45	62	48	41	...	Cloudy

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

THE INDEX TO THE LANCET.

THE Index for the second half-yearly volume for 1895 was given in the issue of Dec. 28th. The practice of supplying loose copies has been discontinued, the Index having been placed in the centre of the journal, whence it can easily be detached, and placed either at the beginning or at the end of the volume.

VOLUMES AND CASES.

VOLUMES for the second half of the year 1895 are now ready. Bound in cloth, gilt lettered, price 18*s*.

Cases for binding the half-year's numbers are also ready. Cloth, gilt lettered, price 2*s*.; by post, 2*s*. 3*d*.

To be obtained on application to the Manager, accompanied by remittance.

THE PAYMENT OF FEES FOR THE NOTIFICATION OF INFECTIOUS CASES.

To the Editors of THE LANCET.

SIRS,—Is there any regulation or rule as to the date when notification fees become due? I find I have not received any fees for cases notified last July. Would it be considered correct to send my account for fees due to the sanitary authority or had I better wait patiently till March 25th? I should be obliged if you would answer these questions in your next edition. I am, Sirs, yours truly,

Feb. 10th, 1896. SANITARY.

*** There is no rule as to this, and the practice varies largely according to the number of notifications received by the authority in question. As most of the accounts of town and district councils are made up to March 25th we should advise waiting until that date has passed.—ED. L.

THE TREATMENT OF CEPHALALGIA.

E. de W. H. writes:—"Can anyone assist me in prescribing a remedy for a patient who has suffered for many years from acute pain of a neuralgic character, situated chiefly over the forehead, but sometimes over the occipital region? The patient in question has suffered from every symptom of left renal calculus for many years, but declines to have any operative interference. She is above middle age, passes large quantities of pus in the urine, and very occasionally blood. No drugs that I have prescribed give any material relief."

M.O.H.—Measles, being a disease which kills some 10,000 to 14,000 persons every year in England and Wales, is certainly a dangerous infectious disorder within the meaning of Section 126 of the Public Health Act, 1875. The omission of the word "measles" from Section 6 of the Infectious Disease (Notification) Act, 1889, does not affect this; indeed, measles is often added to the notifiable diseases under Section 7. How far magistrates would take account in any proceedings under Section 126 of the indifference of the public to regard the fatal and dangerous character of measles is a matter which could only be determined as the result of experience. But the section has not often been utilised in the case of measles.

R. N. I.—The only drug which has been found to yield any good result in such a case is arsenic. It may be given as Fowler's Solution or in the form of arseniate of iron in pill.

A Journalist.—A coroner is a judge; the court is his court, and he can admit to, or exclude from, it whomsoever he pleases.

"THE POSITION OF NURSES."

To the Editors of THE LANCET.

SIRS,—A correspondent in THE LANCET of Feb. 1st censures the loquacity of nurses from a medical point of view. May I, from a patient's point of view, ask if nothing can be done to stop nurses from regaling such patients as they may have under their care, who are able to listen to them, with minute details of the various unpleasant incidents and objects they have witnessed during operations and of other matters which I hope I may describe without offence as "horrors of the hospitals"? I happen to have had several relatives and friends under the care of trained nurses recently, and though I cannot say that their recovery was in any way retarded I can confidently say their minds would have been easier during its progress had they been allowed to dwell upon pleasanter topics. As far as I have been able to ascertain, conversation and anecdotes of the kind indicated are indulged in almost invariably, though whether it is thought that a display of experience, and possibly callousness, will breed respect in the patient, or whether the simple pleasure of making a fellow-creature's flesh creep is their motive, as with the Fat Boy, I cannot tell.

I am, Sirs, yours faithfully,

The Temple, Feb. 4th, 1896. A LAYMAN.

A QUESTION OF ETHICS.

To the Editors of THE LANCET.

SIRS,—An expression of your opinion on the following case will greatly oblige:—B. is called to see a child dangerously ill—in fact, so ill that the patient dies a few hours after his visit. B. makes his examination and is about to leave, when the father of the child tells him that the child has been under the care of A.; B. then says that as such is the case he cannot attend, as the patient is A.'s. The father says, "No, I am far from satisfied with A.'s treatment, and I am not going to have him again." B., however, tries to persuade the father to alter his decision, but the father replies that if B. will not undertake the case he will get someone else, as he does not intend A. to treat it again. Thereupon, B. tells the father that he (the father) must let A. know, and B. then takes the case. A messenger then comes to B.'s surgery for the medicine which B. gives and at the same times inquires if A. has been informed of the change of medical men, and, upon being answered in the negative, B. tells the messenger that he should at once let A. know. In the meantime A. calls and finds he is superseded by B. Is B. correct in taking the patient after the father has asserted most positively that A. shall not treat the patient further? Is B. under an obligation to let A. know, and, if so, is he to withhold his assistance until A. is informed. I am, Sirs, yours truly,

Feb. 10th, 1896. ETHICS.

*** B. seems to us to have acted with complete propriety. It was the duty of the parent to inform A. of his wish for a change in medical attendance. It was not B.'s fault that that duty was not discharged, though there is no harm in a friendly communication between practitioners who are not being candidly dealt with by the parents. B. was right in taking the patient; it would never do to let a dying child fall between two stools because the father acts with indecision.—ED. L.

L.R.C.P. Lond.—We think in the circumstances our correspondent should not send medicines. He has ceased actual attendance and is not a mere retailer of drugs. The by-law gives him a good excuse. If a prescription is required there is no objection to his supplying that; but, of course, that is a new and separate service.

A PLEA FOR CONSIDERATION.

A CORRESPONDENT draws our attention to a certain want of courtesy towards the applicants for assistancies. He gives as examples the fact that he has replied to two dozen advertisements, and in one case only did he receive a card in reply saying that the vacancy had been already filled up. On another occasion his photograph was retained for a fortnight. We fear these things will sometimes happen, and not only because the advertiser may be a little inconsiderate. Sometimes the number of replies to such advertisements are very large. But we hope all our advertisers will take in good part our little recommendation to be thoughtful.

"THE LANCET' COMMISSION ON DANGEROUS PARAFFIN LAMPS."

DR. KYDD of Forfar, N.B., does not agree with the conclusions of this Commission. He thinks the American oils are at fault, and supports his contention by adding that he has tested paraffin by dipping lighted matches into it, but in every case the match was extinguished!

"CHOREA GRAVIDARUM."

To the Editors of THE LANCET.

SIRS,—As in a letter in THE LANCET of July 6th, 1895, from Dr. M'Cann a wish was expressed that all who meet with examples of this malady would publish them, I beg to forward you a short account of one which occurred recently in my practice.

On Dec. 27th, 1895, a young woman aged twenty-four years, at about the end of the seventh month of her first pregnancy, was brought to my surgery suffering from severe chorea. Under the treatment adopted—bromide of potassium, tincture of belladonna, and liquor arsenicalis—there seemed to be a little improvement, but on the 30th I was sent for to see her at her own home, and found her suffering from choreic convulsions of great violence. Her home circumstances were such that I advised her immediate removal to the workhouse hospital. I have since ascertained that she had previously suffered on two occasions from chorea. On the last, three years ago, she was an inmate of the Beckett Hospital, Wakefield, when the disease was very severe; she had also suffered from rheumatism. She was a small woman, thin and emaciated. For the further progress of the case I am indebted to Dr. Robinson, surgeon to the workhouse, who informs me that, owing to her continuous movements, he was unable to decide definitely whether the child was living or not, but he thought he could detect the fœtal heart over the umbilicus. The attacks were most violent and without intermission, feeding her being very difficult; when food was put into the mouth it was frequently rejected, owing to incoördination of deglutition. She was delirious and at times almost maniacal; her heart was normal, as was also her urine. On the first day of her residence in the workhouse no improvement took place from large doses of bromide of potassium, chloral hydrate, belladonna, and liquor arsenicalis. On the next day, however, the improvement was so great that the intention of inducing premature labour was postponed, but at 11.30 P.M. of that day death took place from syncope. I am, Sirs, yours truly,

Rotherham, Feb. 6th, 1896. WM. OXLEY.

Inquirens.—We may say that the visiting by the medical officer of health of infectious diseases when notified "to see if they had been correctly diagnosed" is generally most improper and, as the Local Government Board have decided, "most undesirable." But there are exceptions to this rule. The matter was most fully discussed in the second of our series of articles entitled "Difficulties under the Infectious Disease (Notification) Act," see THE LANCET, Jan. 19th, 26th, and Feb. 9th and 16th, 1895.

Mr. A. A. Mitchard should consult a patent agent of known reputation.

During the week marked copies of the following newspapers have been received:—*Dorset County Chronicle, Elgin Courant, Falkirk Herald, Moray Express, Fife Free Press, Dover Express, Wolverhampton Chronicle, Leicester Daily Post, Inverness Courier, Kirkcudbright Advertiser, Glasgow Herald, Liverpool Courier, Western Daily Mercury, Sheffield Weekly Telegraph, Melbourne Argus, Maidstone Journal, Newcastle Journal, North Star, Birmingham Mail, Westmeath Examiner, Dundee Advertiser, East Anglian Daily Times, Scotsman, Sussex Daily News, Jarrow Express, Vegetarian, Liverpool Daily Post, Llandudno Directory, Brewer and Publican, Manchester Courier, Yorkshire Post, Brighton Gazette, Western Mail, Cheltenham Mercury, Lincolnshire Echo, Leeds Mercury, Sanitary Record, City Press, Bristol Mercury, Kidderminster Shuttle, Scarborough Post, Bournemouth Guardian, Leeds Times, Brixham Edition of the Western Guardian, Belfast News Letter, Local Government Chronicle, Hertfordshire Mercury, Mining Journal, Reading Mercury, Weekly Free Press and Aberdeen Herald, Builder, Times of India, Architect, Citizen, Pioneer Mail, Shrewsbury Chronicle, Birmingham Daily Post, South Wales Echo, Gloucestershire Chronicle, East London Observer, Surrey Advertiser, Local Government Journal, Nairnshire Telegraph, Forfar Herald, Invergorden Times, Australian Medical Journal, Down Recorder (Downpatrick), Daily Argus (Birmingham), The Mail (Portsmouth), &c., &c.*

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